

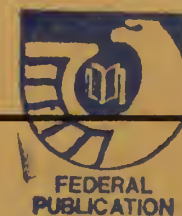
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**National Park Service Annual Science Report**

**1989 INVENTORY OF RESEARCH ACTIVITIES IN THE NATIONAL PARKS**

Science Report NPS/NRWV/NRSR-90/02

United States Department of the Interior • National Park Service



## **BACKGROUND INFORMATION ON 1989 RESEARCH ACTIVITIES**

This report lists the research projects and related studies ongoing or completed in national park units in calendar year 1989. Included are those projects which were funded entirely or partially by the National Park Service (NPS) and/or carried out by NPS personnel, as well as projects which were funded and/or carried out by non-NPS individuals or organizations. A total of 1,994 projects are included in this listing.

For each project, the name, address, and phone number (where available) of the lead investigator are shown in this report. Names of coinvestigators are available from the source data base. Funding is shown with any funds from the National Park Service listed on the top line, and the total funds provided by non-NPS sources shown directly below. Funding data on some projects are incomplete; funding shown as "0" on the report, therefore, may not necessarily mean the project did not receive funding from the National Park Service or other sources.

For more information, contact:

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National Park Service Annual Science Report

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Anne Frondorf, Managing Editor


Science Report NPS/NRWV/NRSR-90/02  
September 1990

United States Department of the Interior  
National Park Service  
Washington D.C.



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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$      |
|-----|------|--|---|--------|-------|-------------------|
| AR  | ANIA | Limnological Studies of Surprise Lake  | Larson, G. L.<br>Oregon State University<br>College of Forestry<br>Cooperative Park Studies Unit<br>Corvallis, OR<br>97331 Phone: (503)737-2043 | 75     | 09/90 | 25,000<br>0       |
| AR  | ANIA | Density and Structure of a Hunted Population of Brown Bears at Black Lake Alaska             | Sellers, R. A.<br>Alaska Dept. Fish and Game<br>P.O. Box 37<br>King Salmon, AK<br>99613 Phone: (907)246-3340                                    | 40     | 12/97 | 36,000<br>102,000 |
| AR  | CAKR | Cape Krusenstern/Red Dog Road Caribou Survey   | Ayres, Ms. L. A.<br>National Park Service<br>P.O. Box 1029<br>Kotzebue, AK<br>99752 Phone: (907)442-3890  | 0      | 00/99 | 0<br>0            |
| AR  | CAKR | 1989 Aerial Waterfowl Surveys  | Bunn, Mr. R.<br>2727 Main<br>Colorado Springs, CO<br>80907 Phone: (719)473-2710   | 0      | 00/99 | 0<br>0            |
| AR  | CAKR | Reconnaissance studies of the coastal lagoons of Cape Krusenstern National Monument, Alaska. | Ford, J.<br>Environmental Protection Agency<br>200 SW 35th St.<br>Corvallis, OR<br>97333 Phone: (503)753-6221                                   | 75     | 06/90 | 0<br>0            |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$  |
|-----|------|---|--|--------|-------|---------------|
| AR  | DENA | Population status and calf mortality of the Denali caribou herd, Denali National Park and Preserve, Alaska. | Adams, L. G.<br>National Park Service<br>2525 Gambell, Room 107<br>Anchorage, AK<br>99503 Phone: (907)257-2569                                 | 50     | 00/92 | 160,000<br>0  |
| AR  | DENA | Significance of scent-marking in Alaskan moose.   | Bowyer, R. T.<br>University of Alaska<br>Institute of Arctic Biology<br>211 Irving Building<br>Fairbanks, AK<br>99775 Phone: (907)474-5311     | 85     | 00/92 | 500<br>10,000 |
| AR  | DENA | Monitoring the Drunken Forest and other mass movements in Denali National Park and Preserve.                | Brease, P.<br>National Park Service<br>Office of Resources & Planning<br>P.O. Box 9<br>Denali Park, AK<br>99755 Phone: (907)683-2294           | 0      | 00/99 | 5,000<br>0    |
| AR  | DENA | Brown bear population and habitat ecology.  | Dean, Dr. F.<br>University of Alaska<br>Dept. of Biology & Wildlife<br>211 Irving Building<br>Fairbanks, AK<br>99775-1280 Phone: (907)474-7672 | 0      | 00/99 | 0<br>4,100    |
| AR  | DENA | Riparian ecosystem recovery on a watershed disturbed by placer mining.                                      | Densmore, Dr. R.<br>National Park Service<br>P.O. Box 9<br>Denali National Park, AK<br>99755 Phone: (907)683-2294                              | 0      | 00/99 | 40,000<br>0   |



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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| AR  | DENA | Restoration of alpine and subalpine plant communities in areas disturbed by construction.                         | Densmore, Dr. R.<br>National Park Service<br>P.O. Box 9<br>Denali National Park, AK<br>99755 Phone: (907)683-2294      | 30     | 00/92 | 0<br>60,000     |
| AR  | DENA | Clonal demography and architecture of Setchell willow ( <i>Salix setchelliana</i> ) along Alaskan glacial rivers. | Douglas, Dr. D.<br>Boise State University<br>Biology Dept.<br>Boise, ID<br>83725 Phone: (208)385-3561                  | 95     | 00/92 | 0<br>1,618      |
| AR  | DENA | Evaluation of mined and unmined streams in the Kantishna Hills region.  | Emmett, W. W.<br>U.S. Geological Survey<br>MS 413<br>P.O. Box 25046, Federal Center<br>Denver, CO<br>80225-0046 Phone: | 10     | 00/99 | 20,000<br>0     |
| AR  | DENA | Sediment transport in the Toklat River, Denali National Park.   | Emmett, W. W.<br>U.S. Geological Survey<br>MS 413<br>P.O. Box 25046, Federal Center<br>Denver, CO<br>80225-0046 Phone: | 100    | 09/89 | 40,000<br>8,000 |
| AR  | DENA | Socio-ecological dynamics of wolf/bear-ungulate systems.  | Haber, Dr. G. C.<br>P.O. Box 64<br>Denali National Park, AK<br>99755 Phone: (907)337-7778                              | 0      | 00/99 | 0<br>50,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| AR  | DENA | Replenishment potential for gravel removal sites for the Toklat River, Alaska.  | Karle, K. F.<br>National Park Service<br>Denali National Park<br>P.O. Box 9<br>Denali National Park, AK<br>99755 Phone: (907)683-2294            | 100    | 05/90 | 13,000<br>2,000 |
| AR  | DENA | The role of mycorrhizae in succession on placer-mined sites.  | Laursen, G.<br>University of Alaska<br>School of Ag. Sci. & Land Res. Mgt.<br>Fairbanks, AK<br>99775 Phone:                                      | 0      | 00/91 | 8,800<br>0      |
| AR  | DENA | Preliminary investigations for developing a long-term monitoring program for nesting Golden Eagles ( <i>Aquila chrysaetos</i> ); and raptor inventory and monitoring. | McIntyre, C. L.<br>National Park Service<br>P.O. Box 9<br>Denali National Park, AK<br>99755 Phone: (907)683-2511                                 | 60     | 09/91 | 40,000<br>0     |
| AR  | DENA | Demography and distribution of wolves, Denali National Park and Preserve, Alaska.   | Mech, Dr. L. D.<br>National Park Service<br>P.O. Box 9<br>Denali National Park, AK<br>99755 Phone: (907)683-2294                                 | 67     | 10/92 | 125,000<br>0    |
| AR  | DENA | Use and selection of lambing habitat by Dall's sheep.   | Rachlow, J. L.<br>University of Alaska<br>Dept. of Biology & Wildlife<br>211 Irving Building<br>Fairbanks, AK<br>99775-1780 Phone: (907)474-5311 | 100    | 07/89 | 4,500<br>1,650  |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| AR  | DENA | Merlin monitoring and ecology studies.  | Schempf, Mr. P. F.<br>U.S. Fish and Wildlife Service<br>Raptor Management Studies<br>P.O. Box 021287<br>Juneau, AK<br>99802 Phone: (907)586-7243     | 0      | 00/99 | 3,000<br>16,800 |
| AR  | DENA | Cellular slime molds in soils of Alaskan tundra.  | Stephenson, Dr. S. L.<br>Fairmont State College<br>Department of Biology<br>Fairmont, WV<br>26554 Phone: (304)366-9224                               | 25     | 01/92 | 0<br>500        |
| AR  | DENA | Natural regulation of surface water quality by geomorphology and vegetation, Denali National Park and Preserve. | Stottlemeyer, R.<br>Michigan Technological University<br>Department of Biology<br>Houghton, MI<br>49931 Phone: (906)487-2478                         | 95     | 02/90 | 4,000<br>0      |
| AR  | DENA | Denali road traffic impact on wildlife.   | Taylor, D.<br>National Park Service<br>Division of Natural Resources<br>2525 Gambell St., Rm 107<br>Anchorage, AK<br>99503-2892 Phone: (907)257-2571 | 75     | 04/90 | 8,000<br>0      |
| AR  | DENA | Ecology of moose at Denali National Park and Preserve.  | Van Ballenberghe, V.<br>U.S. Fish & Wildlife Service<br>201 East 9th Ave.<br>Suite 206<br>Anchorage, AK<br>99501 Phone: (907)271-2575                | 50     | 00/99 | 0<br>15,500     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| AR  | DENA | Bathymetry and stratigraphy of Wonder Lake, a glacial lake in Denali National Park and Preserve, Alaska. | Werner, Dr. A.<br>Mount Holyoke College<br>Department of Geology<br>South Hadley, MA<br>01075 Phone: (413)538-2134                          | 30     | 01/92 | 0<br>4,500    |
| AR  | GAAR | Population ecology of wolves in Gates of the Arctic National Park and Preserve                           | Adams, Mr. L. G.<br>National Park Service<br>Alaska Regional Office<br>2525 Gambell St.<br>Anchorage, AK<br>99503-2892 Phone: (907)257-2569 | 70     | 06/91 | 0<br>0        |
| AR  | GAAR | Monitor Furbearer Harvest  | Britten, Mr. M. W.<br>National Park Service<br>P.O. Box 74680<br>Fairbanks, AK<br>99707 Phone: (907)456-0281                                | 15     | 09/00 | 0<br>0        |
| AR  | GAAR | Survey for peregrine falcons and other cliff-nesting raptors in GAAR                                     | Britten, Mr. M. W.<br>National Park Service<br>Gates of the Arctic NP&P<br>P.O. Box 74680<br>Fairbanks, AK<br>99707 Phone: (907)456-0281    | 50     | 12/92 | 0<br>0        |
| AR  | GAAR | Gates of the Arctic National Park Lake Study   | Johnson, Mr. R.<br>U.S. Fish & Wildlife Service<br>101-12th Ave.<br>P.O. Box 20<br>Fairbanks, AK<br>99701 Phone: (907)456-0287              | 80     | 12/90 | 1<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| AR  | GAAR | Limnological assessment of Itkillik Lake, Brooks Range, Alaska                                  | Jones, Dr. J. R.<br>University of Missouri<br>School of Nat. Resources<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3543          | 60     | 08/90 | 0<br>1,979    |
| AR  | GAAR | Central Arctic Management Area (Mineral and Hydrocarbon Assessment)                             | Kelly, Dr. J. S.<br>U.S. Geological Survey<br>Branch of Alaskan Geology<br>4200 University Dr.<br>Anchorage, AK<br>99508-4667 Phone: (907)561-1181 | 75     | 09/92 | 0<br>0        |
| AR  | GAAR | Killik-Chandler Lake geological mapping   | Mull, Dr. C. G.<br>Alaska Div. of Geological Surveys<br>3700 Airport Way<br>Fairbanks, AK<br>99709 Phone: (907)474-7147                            | 80     | 12/92 | 0<br>0        |
| AR  | GAAR | Analysis of Fold and Thrust Belt Kinematics in the Central Brooks Brooks Range, Northern Alaska | Oldow, Dr. J. S.<br>Rice University<br>Dept. of Geology and Geophysics<br>P.O. Box 1892<br>Houston, TX<br>77251 Phone: (713)527-4880               | 50     | 07/90 | 0<br>0        |
| AR  | GLBA | Sea Otter Monitoring  | Beckert, E.<br>National Park Service<br>P.O. Box 22<br>Gustavus, AK<br>99826 Phone: (907)697-2277  | 0      | 00/99 | 1,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| AR  | GLBA | Survey of Kittiwake Colonies   | Beckert, E.<br>National Park Service<br>P.O. Box 22<br>Gustavus, AK<br>99826 Phone: (907)697-2277                             | 0      | 00/99 | 0<br>0       |
| AR  | GLBA | 1989 Salmon Stream Surveys   | Blackie, B.<br>Glacier Bay National Park Service<br>P.O. Box 140<br>Gustavus, AK<br>99826-0140 Phone: (907)697-2230           | 0      | 00/99 | 7,000<br>0   |
| AR  | GLBA | Beach use by Black Bear in east Glacier Bay  | Blackie, B.<br>Glacier Bay National Park Service<br>P.O. Box 140<br>Gustavus, AK<br>99826-0140 Phone: (907)697-2230           | 0      | 00/99 | 11,000<br>0  |
| AR  | GLBA | Controls over primary succession at Glacier Bay, Alaska                                | Chaplin, III, F. S.<br>University of California<br>Dept. of Integrative Biology<br>Berkeley, CA<br>94720 Phone: (415)642-1003 | 50     | 09/91 | 0<br>25,000  |
| AR  | GLBA | Characteristics and settling rates of suspended sediment in a macro-tidal environment. | Cowen, Dr. E. A.<br>Appalachian State University<br>Department of Geology<br>Boone, NC<br>28608 Phone: (704)262-2260          | 15     | 12/90 | 0<br>5,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | WPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| AR  | GLBA | Multiple pathways of primary succession at Glacier Bay National Park                                 | Fastie, C.<br>University of Alaska - Fairbanks<br>Institute of Arctic Biology<br>Fairbanks, AK<br>99775 Phone: (907)474-6688 | 70     | 09/90 | 0<br>0        |
| AR  | GLBA | Grounding line systems of modern temperate tidewater glaciers and their effect on glacier stability. | Hunter, L.<br>Northern Illinois University<br>Chicago, IL<br>Phone: ( ) -  | 33     | 09/90 | 0<br>0        |
| AR  | GLBA | Beach debris and bird/mammal carcass survey  | Johnson, S.<br>National Marine Fisheries Service<br>Auke Bay Laboratories<br>Juneau, AK<br>99826 Phone: ( ) -                | 0      | 00/99 | 1,000<br>500  |
| AR  | GLBA | Wildlife and vessel inventory of the Beardslee Islands in Glacier Bay                                | Maier, A.<br>16995 Glacier Highway<br>Juneau, AK<br>99801 Phone: ( ) -   | 100    | 08/89 | 0<br>0        |
| AR  | GLBA | Survey of the 1989 Bald Eagle population in the Beardslee Islands                                    | Maier, A.<br>16995 Glacier Highway<br>Juneau, AK<br>99801 Phone: ( ) -   | 100    | 08/89 | 0<br>0        |
| AR  | GLBA | Nesting ecology of the Black Oystercatcher (Haematopus bachmani) in the Beardslee Island.            | Maier, A.<br>16995 Glacier Highway<br>Juneau, AK<br>99801 Phone: ( ) -   | 100    | 08/89 | 0<br>0        |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|--|---|--------|-------|----------------|
| AR  | GLBA | Killer whale abundance and feeding behavior in Glacier Bay and Icy Strait, Alaska. | Matkin, D. R.<br>P.O. Box 22<br>Gustavus, AK<br>99826<br>Phone: (907)697-2277   | 0      | 00/99 | 6,000<br>6,000 |
| AR  | GLBA | 1989 Beardslee Island Survey   | Matkin, D. R.<br>Glacier Bay National Park<br>P.O. Box 22<br>Gustavus, AK<br>99826<br>Phone: (907)697-2277              | 100    | 00/99 | 6,000<br>0     |
| AR  | GLBA | Salmon stream surveys in Glacier Bay National Park                                 | Milner, Dr. A.<br>University of Alaska<br>Institute of Arctic Biology<br>Fairbanks, AK<br>99775<br>Phone: (907)345-4643 | 100    | 12/89 | 2,000<br>0     |
| AR  | GLBA | Colonization and ecological development of new streams                             | Milner, Dr. A.<br>University of Alaska<br>Institute of Arctic Biology<br>Fairbanks, AK<br>99775<br>Phone: (907)345-4643 | 0      | 00/99 | 0<br>2,000     |
| AR  | GLBA | Glacier Bay Eagle/Eagle Nest Survey  | Mow, J.<br>National Park Service<br>P.O. Box 22<br>Gustavus, AK<br>99826<br>Phone: (907)697-2277                        | 0      | 00/99 | 1,000<br>0     |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|--|--|--------|-------|-----------------|
| AR  | GLBA | Sedimentary environments fed by terrestrially-grounded glaciers.                           | Phillips, A. C.<br>University of Illinois at Chicago<br>Dept. Geological Science m/c 186<br>P.O. Box 4348<br>Chicago, IL<br>60680 Phone: ( ) - | 100    | 08/90 | 0<br>35,000     |
| AR  | GLBA | Harbor Porpoise Baseline Survey  | Prather, S.<br>National Park Service<br>P.O. Box 22<br>Gustavus, AK<br>99826 Phone: (907)697-2277  | 33     | 12/91 | 6,000<br>0      |
| AR  | GLBA | Humpback whale monitoring  | Schroeder, M.<br>National Park Service<br>P.O. Box 140<br>Gustavus, AK<br>99826-0140 Phone: (907)697-2230                                      | 100    | 11/89 | 11,000<br>6,000 |
| AR  | GLBA | Install remote automatic weather station on Russell Island                                 | Schroeder, M.<br>Glacier Bay National Park Service<br>P.O. Box 140<br>Gustavus, AK<br>99826-0140 Phone: (907)697-2230                          | 95     | 12/89 | 9,000<br>0      |
| AR  | GLBA | Marine intertidal community development following glacial recession in Glacier Bay, Alaska | Sherman, L.<br>University of Alaska<br>Institute of Marine Science<br>Fairbanks, AK<br>99775 Phone: (907)474-7747                              | 90     | 12/91 | 0<br>833        |

| Reg | Park | Project Title                                 | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|---|--|--------|-------|----------------|
| AR  | GLBA | Glacier Geology of the Burroughs Glacier      | Syverson, K.<br>University of Wisconsin<br>Department of Geology<br>1215 W. Dayton Street<br>Madison, WI<br>53706 Phone: (608)262-7863           | 0      | 00/99 | 0<br>4,000     |
| AR  | GLBA | Burroughs Glacier Recording Team              | Syverson, K.<br>University of Wisconsin<br>Dept. of Geology and Geophysics<br>1215 W. Dayton Street<br>Madison, WI<br>53706 Phone: (608)262-7863 | 40     | 08/90 | 0<br>4,000     |
| AR  | GLBA | Cruise Ship Stack Emissions                   | Vequist, Mr. G.<br>National Park Service<br>2525 Gambell Street<br>Anchorage Regional Office<br>Anchorage, AK<br>99503 Phone: ( ) -              | 100    | 12/89 | 0<br>0         |
| AR  | GLBA | Brown Bear Project                            | Wolfe, D.<br>Biological Technician<br>P.O. Box 1572<br>Anchorage, AK<br>99510 Phone: ( ) -   | 60     | 10/89 | 15,000<br>0    |
| AR  | KATM | Oil Spill Cleanup Response, Shoreline Surveys | Alaska Dept. of Environmental Cons.<br>Kodiak Oil Spill Response Office<br>P.O. Box 2998<br>Kodiak, AK<br>99615 Phone:                           | 70     | 07/90 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| AR  | KATM | Exxon Winter Program, Shoreline Monitoring and Evaluation Program                                    | Exxon Operations<br>3201 "C" Street, #403<br>Anchorage, AK<br>99503 Phone: (907)564-3669   | 0      | 06/90 | 0              |
| AR  | KATM | Oil Spill Cleanup Response, Shoreline Surveys  | Alaska Dept. of Environmental Cons.<br>Kodiak Oil Spill Response Office<br>P.O. Box 2998<br>Kodiak, AK<br>99615 Phone:                             | 70     | 07/90 | 0              |
| AR  | KATM | Genetic Stock Identification of Bristol Bay, Alaska Salmon Stocks                                    | Bailey, R.<br>U.S. Fish and Wildlife Service<br>Fisheries Management Services<br>1101 E. Tudor Road<br>Anchorage, AK<br>99503 Phone: (907)786-3546 | 30     | 08/90 | 0              |
| AR  | KATM | Novarupta Geophysical Project  | Eichelberger, J. C.<br>Sandia National Laboratories<br>Geochemistry Division, 6233<br>P.O. Box 5800<br>Albuquerque, NM<br>87185 Phone: ( ) -       | 40     | 09/94 | 450,000        |
| AR  | KATM | Comparison of human impacts on bear behavior and sex ratios at Salmon Streams in Katmai NP&P, Alaska | Gilbert, B. K.<br>Utah State University<br>Logan, UT<br>84322-5210 Phone: (801)750-2540  | 95     | 00/99 | 6,000<br>2,000 |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| AR  | KATM | Water Quality Baseline Study   | La Perriere, Ms. J.<br>NPS-Water Resources Division<br>138 Arctic Health Research Bldg.<br>Alaska Coop. Fish. Rsch. Fish. Unit<br>Fairbanks, AK<br>99775-0110 Phone: ( ) - | 10     | 09/92 | 135,000<br>0  |
| AR  | KATM | Alaska Volcanic Hazards  | Miller, Dr. T. P.<br>U.S. Geological Survey<br>Alaska Volcano Observatory<br>4200 University Dr.<br>Anchorage, AK<br>99508 Phone: (907)561-1181                            | 100    | 06/89 | 0<br>35,000   |
| AR  | KATM | Rainbow Trout Biological Sampling  | Minard, R. E.<br>Division of Sport Fish<br>Alaska Dept of Fish and Game<br>P.O. Box 230<br>Dillingham, AK<br>99576 Phone: (907)842-2427                                    | 0      | 00/99 | 0<br>8,000    |
| AR  | KATM | Exxon Valdez Cultural Resources Program  | Mobley, C. M.<br>Exxon Valdez Cultural Resource Prog<br>P.O. Box 240409<br>Anchorage, AK<br>99524-0409 Phone: (907)564-3658  | 75     | 07/90 | 0<br>0        |
| AR  | KATM | Late Quaternary Volcanic and Glacial Stratigraphy at Windy Creek, Katmai National Park, Alaska | Pinney, D. S.<br>University of Alaska<br>Dept. Geology/Geophysics<br>Fairbanks, AK<br>99775 Phone:   | 70     | 09/90 | 0<br>4,000    |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| AR  | KATM | Kodiak/Katmai Crustal Strain Project   | Prescott, W.<br>U.S. Geological Survey<br>MS977<br>345 Middlefield Road<br>Menlo Park, CA<br>94025 Phone:       | 5      | 00/99 | 0<br>62,500   |
| AR  | KATM | Annual moose sex and age composition trend surveys   | Sellers, R. A.<br>Alaska Dept. of Fish and Game<br>P.O. Box 37<br>King Salmon, AK<br>99613 Phone: (907)246-3340 | 0      | 00/99 | 0<br>2,000    |
| AR  | KATM | Assessment of the Exxon Valdez oil spill on brown bear populations on the Alaska peninsula | Sellers, R. A.<br>Alaska Dept. of Fish and Game<br>P.O. Box 39<br>King Salmon, AK<br>99613 Phone: (907)246-3340 | 30     | 06/92 | 0<br>162,000  |
| AR  | KEFJ | Radio-Carbon Dating of Interstadial Trees  | Calkin, P.<br>State University of New York<br>Department of Geology<br>Amherst, NY<br>14226 Phone:              | 40     | 00/99 | 0<br>0        |
| AR  | KEFJ | Beetle Collection  | Capogreco, J. V.<br>Florida State University<br>Biological Sciences<br>Tallahassee, FL<br>32306-2043 Phone:     | 0      | 00/99 | 0<br>0        |
| AR  | KEFJ | Snow Survey Measurements   | Clifford, B.<br>Soil Conservation Service<br>Anchorage, AK  | 100    | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NP\$\$/Other\$ |
|-----|------|---|--|--------|-------|----------------|
| AR  | KEFJ | Exxon Shoreline Cleanup Assessment                          | Dishon, B.<br>VECO, Inc for Exxon<br>Seward, AK<br>99664 Phone:  | 50     | 00/99 | 0<br>0         |
| AR  | KEFJ | Oil Injured Wildlife  | Early, T.<br>U.S. Fish and Wildlife Service<br>1101 Tudor Road<br>Anchorage, AK<br>99503 Phone:                | 50     | 00/99 | 0<br>0         |
| AR  | KEFJ | Plant Succession Study by Exit Glacier                      | Helm, D.<br>University of Alaska<br>Agr. and Range Expt. Sta.<br>532 E. Fireweed<br>Palmer, AK<br>99645 Phone: | 5      | 00/99 | 0<br>0         |
| AR  | KEFJ | ARPA Permit for subsurface testing on<br>Native-Select Land | Johnson, J.<br>Chugach Alaska Corp.<br>3000 A St., Suite 400<br>Anchorage, AK<br>99503 Phone:                  | 50     | 00/99 | 0<br>0         |
| AR  | KEFJ | Hydrocarbon Analysis in Mussel Tissue                       | Karinen, J.<br>National Marine Fisheries Service<br>P.O. Box 210155<br>Auke Bay, AK<br>99821 Phone:            | 70     | 00/99 | 0<br>0         |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| AR  | KEFJ | Botanical Collections                                       | Koropachinsky, I. Y.<br>Central Siberian Botanical Garden<br>Novosibirsk-90<br>USSR<br>630090 Phone: | 50     | 00/99 | 0            |
| AR  | KEFJ | Botanical Collections                                       | Krasnoborov, I. M.<br>Central Siberian Botanical Garden<br>Novosibirsk-90<br>USSR<br>630090 Phone:   | 50     | 00/99 | 0            |
| AR  | KEFJ | ARPA Permit for Subsurface Testing of<br>Archeological Site | Mobley, C.<br>Exxon/Valdez Cultural Prog<br>3201 C St.<br>Anchorage, AK<br>99503 Phone:              | 50     | 00/99 | 0            |
| AR  | KEFJ | Botanical Collections                                       | Murray, D. F.<br>University of Alaska Museum<br>Fairbanks, AK<br>99755-1200 Phone:                   | 50     | 00/99 | 0            |
| AR  | KEFJ | Transect marking and specimen collection                    | Pasley, R.<br>Alaska State Emergency Ctr<br>P.O. Box 6000<br>Wasilla, AK<br>99669 Phone:             | 50     | 00/99 | 0            |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| AR  | KEFJ | Shoreline transect markings and oil sampling   | Pearson, L. A.<br>Alaska Dept. of Environmental Cons.<br>P.O. Box 1689<br>Seward, AK<br>99664 Phone:        | 50     | 00/99 | 0<br>0        |
| AR  | KEFJ | Botanical Collections  | Skuortsov, A. C.<br>Main Botanical Garden<br>Botanicheskaya 4<br>Moscow, USSR<br>12727C Phone:              | 50     | 00/99 | 0<br>0        |
| AR  | KEFJ | Oil Spill Monitoring: Photos and Physical Measurements   | Teal, A.<br>Exxon USA<br>3201 C. St.<br>Anchorage, AK<br>99503 Phone:                                       | 50     | 00/99 | 0<br>0        |
| AR  | KOVA | Demography and movements of wolves in relation to Western Arctic Caribou Herd in northwest Alaska. | Ballard, Mr. W.<br>Alaska Dept. of Fish and Game<br>P.O. Box 1148<br>Nome, AK<br>99762 Phone: (907)443-2271 | 50     | 09/91 | 0<br>0        |
| AR  | KOVA | Archeological Reconnaissance in the Great Kobuk Sand Dunes: Northwest Alaska                       | Stanford, D. J.<br>Smithsonian Institute  | 100    | 08/89 | 0<br>0        |
| AR  | LACL | Hydrologic Resources and Hazards at Alaska Volcanoes   | Brabets, T.<br>U. S. Geological Survey<br>1209 Orca Street<br>Anchorage, AK<br>99501 Phone: (907)271-4153   | 40     | 12/91 | 0<br>5,500    |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| AR  | LACL | Tazimina River Rainbow Trout Study                       | Brookover, III, T. E.<br>Alaska Dept. of Fish & Game<br>P.O. Box 230<br>Dillingham, AK<br>99576 Phone:   | 95     | 09/90 | 0<br>4,300     |
| AR  | LACL | Complete Cataloging Museum Collection                    | Davies, Mr. G.<br>National Park Service<br>2525 Gambell Street<br>Anchorage, AK<br>99503 Phone: (907)257-2656                                  | 50     | 01/90 | 20,000<br>0    |
| AR  | LACL | Genetic Stock Identification of Salmon of<br>Bristol Bay | Larson, J.<br>Fish and Wildlife Service<br>King Salmon Fishers Assist. Office<br>P.O. Box 277<br>King Salmon, AK<br>99613 Phone: (907)246-3442 | 75     | 09/90 | 0<br>0         |
| AR  | LACL | Silver Salmon Creek Coho Salmon Monitoring<br>Program    | Nelson, D. C.<br>Alaska Department of Fish & Game<br>P.O. Box 3150<br>Soldotna, AK<br>99669 Phone: (907)262-9368                               | 95     | 08/89 | 1<br>2,200     |
| AR  | LACL | Fire Management and Monitoring (Fire-Pro)                | Rasmussen, B.<br>Lake Clark National Park<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218   | 100    | 09/89 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| AR  | LACL | Red Salmon Fishery Study (Newhalen-Lake Clark Study area)  | Roger, D.<br>University of Washington<br>School of Fisheries<br>Seattle, WA<br>98195 Phone: (206)543-7838   | 95     | 09/89 | 0<br>0        |
| AR  | LACL | Comprehensive Baseline Determination of Chemical and Physical Characteristics and Primary Productivity of Lake Clark National Park and Selected Smaller Lakes, Lake Clark National Park and Preserve, Alaska | Stottlemeyer, R.<br>Michigan Technological University<br>College of Sciences and Arts<br>Department of Biological Sciences<br>Houghton, MI<br>49931 Phone: Stottlemeyer | 95     | 05/90 | 0<br>0        |
| AR  | LACL | Mulchatna Caribou Herd   | Twitchell, H. A.<br>Lake Clark National Park<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218   | 50     | 00/99 | 0<br>0        |
| AR  | LACL | Moose Trend Area Monitoring  | Twitchell, A. H.<br>Lake Clark National Park<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218   | 100    | 11/89 | 15<br>0       |
| AR  | LACL | A Park/Preserve wide survey of bald eagle nesting sites was conducted in June of 1989.   | Twitchell, H. A.<br>National Park Service<br>Lake Clark<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218  | 100    | 06/89 | 0<br>1,989    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| AR  | LACL | Glacial Monitoring Program   | Twitchell, H. A.<br>National Park Service<br>Lake Clark<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218                         | 0      | 00/99 | 0<br>0        |
| AR  | LACL | Costal Baseline Inventory, Pre-Oil Impact Studies                        | Twitchell, H. A.<br>Lake Clark National Park<br>Port Alsworth, AK<br>99653 Phone: (907)781-2218                                    | 100    | 09/89 | 0<br>0        |
| AR  | NOAT | Tundra Swan Survey of the lower Noatak River basin                       | Ayres, Ms. L. A.<br>National Park Service<br>Northwest Alaska Areas<br>P.O. Box 1029<br>Kotzebue, AK<br>99752 Phone: (907)442-2758 | 0      | 00/99 | 0<br>0        |
| AR  | NOAT | Dall Sheep Survey of the Baird Mountains in the Noatak National Preserve | Ayres, Ms. L. A.<br>National Park Service<br>Northwest Alaska Areas<br>P.O. Box 1029<br>Kotzebue, AK<br>99752 Phone: (907)442-2758 | 45     | 00/99 | 0<br>5,500    |
| AR  | NOAT | Noatak River Raptor Survey   | Ball, Mr. J. Z.<br>48663 Todd Eymann Road<br>Mira Monte, CA<br>93641 Phone: (209)336-2366  | 25     | 00/99 | 1<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| AR  | NOAT | Demography of Noatak Grizzly Bears in Relation to Human Exploitation and Mining Development. | Ballard, Mr. W. B.<br>Alaska Dept. of Fish & Game<br>P.O. Box 1148<br>Nome, AK<br>99762 Phone: (907)443-2271                                       | 75     | 09/90 | 0<br>0       |
| AR  | NOAT | Small mammal inventory and demographic study, Noatak National Preserve, AK                   | Bradshaw, Mr. D.<br>Mississippi State Univ. Resear. Ctr<br>Stennis Space Center<br>Nat. Space Tech. Lab, MS<br>39529 Phone: (601)688-3229          | 50     | 09/91 | 20,000<br>0  |
| AR  | NOAT | Air Quality Monitoring   | Cahill, Mr. T. A.<br>University of California<br>Crocker Nuclear Lab<br>Davis, CA<br>95616 Phone:  | 0      | 00/99 | 114<br>0     |
| AR  | NOAT | Northwest Alaska Areas Snow Survey   | Clagget, Mr. G.<br>Soil Conservation Service<br>Snow Survey Unit<br>201 E. 9th Ave., Suite 300<br>Anchorage, AK<br>99501-3687 Phone: (907)271-2424 | 5      | 00/99 | 26<br>0      |
| AR  | NOAT | Mineral assessment in the Misheguk Mt and Avan Hill area                                     | Light, Mr. T. D.<br>U.S. Geological Survey<br>4200 University Dr.<br>Anchorage, AK<br>99818 Phone: (907)786-7431                                   | 100    | 07/89 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| AR  | NOAT | Alaska Lepidoptera Survey   | Philip, Dr. K. W.<br>University of Alaska<br>Institute of Arctic Biology<br>Fairbanks, AK<br>99701 Phone:   | 50     | 07/95 | 1<br>0        |
| AR  | NOAT | Trends in surface water quality in Noatak National Preserve                 | Stottlemeyer, Dr. R.<br>National Park Service<br>Michigan Technological University<br>Great Lakes Area Resource Studies<br>Houghton, MI<br>49931 Phone: (906)487-2025 | 15     | 06/89 | 0<br>4,300    |
| AR  | NOAT | Geologic studies of the Sinikanneyak Mt. and Copter Peak ophiolites.        | Wirth, Mr. K. R.<br>Cornell University<br>Department of Geological Sciences<br>Ithaca, NY<br>14853 Phone:   | 95     | 00/90 | 500<br>0      |
| AR  | WRST | Aerial Salmon Counts of Kijik River System, Tazimina River and Sucker Creek | Bill, D.<br>Alaska Dept. of Fish & Game<br>P.O. Box 37<br>King Salmon, AK<br>99613 Phone: (907)246-3340   | 95     | 09/89 | 0<br>0        |
| AR  | WRST | Evolutionary Investigation in the Genus Antennaria                          | Chinnappa, Dr. C. C.<br>University of Calgary<br>Department of Biological Sciences<br>Calgary, Canada<br>T2N1N4 Phone:  | 0      | 12/95 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| AR  | WRST | Effects of Grizzly Bear Digs on the Alpine Plant Communities of the Wrangell Mountains, Alaska. | Doak, Mr. D.<br>University of Washington<br>Department of Zoology<br>NJ-15<br>Seattle, WA<br>98195<br>Phone: (206)543-7095  | 0      | 10/92 | 0<br>0        |
| AR  | WRST | Dating the Pre-Wisconsin Glaciations and Climatic Fluctuations of Alaska                        | Evenson, Dr. E. B.<br>Lehigh University<br>Department of Geologic Science<br>Williams Hall #31<br>Bethlehem, PA<br>18018<br>Phone: (215)758-3659                        | 90     | 12/90 | 0<br>0        |
| AR  | WRST | Chisana Caribou Herd Management   | Kellyhouse, Mr. D.<br>Alaska Department of Fish and Game<br>Box 305<br>Tok, AK<br>99780<br>Phone: (907)883-2971   | 0      | 10/89 | 0<br>0        |
| AR  | WRST | Natural Renewable Resources Inventory   | Larson, Mr. F. R.<br>United States Forest Service<br>Forestry Sciences Laboratory<br>201 East 9th Avenue, Suite 303<br>Anchorage, AK<br>99501<br>Phone: (907)271-2585   | 97     | 06/91 | 0<br>0        |
| AR  | WRST | Paleomagnetic Study of the Southern Alaska Superterrane: A Test for Transport on the Kula Plate | Panuska, Dr. B. C.<br>Mississippi State University<br>Department of Geology and Geography<br>P.O. Drawer 5167<br>Mississippi State, MS<br>39762<br>Phone: (615)325-2911 | 75     | 12/90 | 0<br>1,979    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| AR  | WRST | Alaska Lepidoptera Survey   | Philip, Dr. K. W.<br>University of Alaska<br>Institute of Arctic Biology<br>Fairbanks, AK<br>99775 Phone: (907)479-2689        | 0      | 00/99 | 0<br>0        |
| AR  | WRST | Wrangell Volcanic Field   | Richter, Dr. D. H.<br>U.S. Geological Survey<br>4200 University Drive<br>Anchorage, AK<br>99508-4667 Phone: (907)561-1181      | 80     | 12/91 | 1<br>0        |
| AR  | WRST | Metamorphic and Structural Evolution of the Chugach Metamorphic Complex | Sisson, Dr. V. B.<br>Rice University<br>Department of Geology and Geophysics<br>Houston, TX<br>77251-1892 Phone: (713)527-8101 | 20     | 12/91 | 0<br>0        |
| AR  | YUCH | Peregrine Falcon Survey and Banding                                     | Ambrose, R. E.<br>U.S. Fish and Wildlife Service<br>1412 Airport Way<br>Fairbanks, AK<br>99701 Phone:                          | 50     | 09/99 | 0<br>0        |
| AR  | YUCH | Bryophyte and Lichen Floras   | Murray, B. M.<br>University of Alaska Museum<br>Fairbanks, AK<br>99775-1200 Phone:   | 0      | 00/99 | 0<br>0        |
| AR  | YUCH | Alaska Lepidoptera Study  | Philip, K. W.<br>University of Alaska<br>Institute of Arctic Biology<br>Fairbanks, AK  | 0      | 00/99 | 0<br>0        |

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Investigators Annual Report - 1989

| Reg | Park | Project Title | Investigator/Address/Phone        | % done | End | NPS\$/Other\$ |
|-----|------|---------------|-----------------------------------|--------|-----|---------------|
|     |      |               | 99775                      Phone: |        |     |               |



Investigators Annual Report - 1989

| Reg | Park | Project Title                  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--------------------------------|--|--------|-------|---------------|
| MAR | ALPO | Acid Mine Drainage Assessment  | NPS/Bureau of Mines/PSU  | 0      | 12/92 | 0             |
| MAR | ALPO | Establish Gallitzin Road Trace | Levin, J .<br>Denver Service Center<br>National Park Service<br>P.O. Box 25287<br>Denver, CO<br>80225 Phone: ( ) -                           | 100    | 11/89 | 0             |
| MAR | ALPO | Lakebed Restoration            | Traynham, G. M.<br>NPS-Coop. Park Studies Unit<br>P.O. Box 247<br>Cresson, PA<br>16630 Phone: (814)886-8176                                  | 45     | 05/91 | 70,000        |
| MAR | ALPO | Gypsy Moth                     | Traynham, G. M.<br>Allegheny Portage NHS<br>P.O. Box 247<br>Cresson, PA<br>16630 Phone: (814)886-8176  | 0      | 00/99 | 0             |
| MAR | ASIS | Juvenile Blue Crab Recruitment | Anderson, Mr. R. D.<br>Horn Point Environmental Lab<br>University of Maryland<br>P.O. Box 775<br>Cambridge, MD<br>21613 Phone: (301)228-8200 | 95     | 05/90 | 0<br>6,000    |

Investigators Annual Report - 1989

| Reg | Park | Project Title                                       | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MAR | ASIS | Large scale exclosures on ASIS - the siting process | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Laboratory<br>Princess Anne, MD<br>21853 Phone: (301)641-3842 | 99     | 01/90 | 73,000<br>0   |
| MAR | ASIS | Deer Harvest Assessment - 1989                      | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842        | 100    | 12/89 | 1,131<br>0    |
| MAR | ASIS | Deer Harvest Assessment - 1988                      | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842        | 99     | 01/90 | 4,600<br>300  |
| MAR | ASIS | Chiroptera Survey                                   | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842        | 99     | 07/89 | 400<br>0      |
| MAR | ASIS | Annual Feral Horse Census                           | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842        | 100    | 05/89 | 300<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| MAR | ASIS | Home Range and Habitat Use of Raccoons   | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842            | 50     | 01/91 | 0<br>0       |
| MAR | ASIS | Relationship Between Home Range of Breeding Red Fox and Piping Plover Nest Sites | Bashore, Dr. T. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Princess Anne, MD<br>21853 Phone: (301)641-3842            | 50     | 09/90 | 5,000<br>0   |
| MAR | ASIS | Marine Recreational Fishery Statistics Survey                                    | Chandler, Ms. K. A.<br>KCA Research, Inc.<br>501 Cherokee Ave.<br>Suite 111<br>Alexandria, VA<br>22312 Phone: (703)642-5220                          | 0      | 00/99 | 0<br>2,000   |
| MAR | ASIS | Storm-related Mortality of Busycon spp. at Assateague Island National Seashore   | Counts, Dr. C. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Box 1106<br>Princess Anne, MD<br>21853 Phone: (301)651-9311 | 5      | 00/99 | 0<br>150     |
| MAR | ASIS | Seashells of Assateague Island National Seashore                                 | Counts, Dr. C. L.<br>University of MD - Eastern Shore<br>Coastal Ecology Research Lab<br>Box 1106<br>Princess Anne, MD<br>21853 Phone: (301)651-9311 | 90     | 04/90 | 433<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| MAR | ASIS | Foraging Habitats and Behavior of Piping Plovers   | Fraser, Dr. J. D.<br>VA Tech. & State University<br>Dept. of Fisheries & Wildlife Sci.<br>Blacksburg, VA<br>24061-0321 Phone: (703)231-6064                | 50     | 05/91 | 19,123<br>5,200 |
| MAR | ASIS | Residence Time of Migrating Peregrine Falcons  | Fuller, Mr. M. R.<br>Patuxent Wildlife Research Center<br>U.S. Fish and Wildlife Service<br>Laurel, MD<br>20708 Phone: (301)498-0282                       | 80     | 02/90 | 0<br>1,500      |
| MAR | ASIS | Does feral pony grazing encourage the expansion of <i>Distichlis spicata</i> in the <i>Spartina alterniflora</i> saltmarshes of ASIS | Furbish, Ms. C. E.<br>Assateague Island NS<br>Route 2, Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1756   | 80     | 03/90 | 280<br>0        |
| MAR | ASIS | Vegetation Monitoring  | Furbish, Ms. C. E.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 500<br>0        |
| MAR | ASIS | Maryland Waterbird Study   | Gates, Dr. J. E.<br>University of Maryland<br>Appalachian Environmental Lab<br>Frostburg, MD<br>21532 Phone:   | 95     | 12/89 | 0<br>3,000      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| MAR | ASIS | Parasites in Sika Deer   | Gavaghan, Mr. P.<br>University of Pittsburgh<br>633 Parran Hall<br>Pittsburgh, PA<br>15261 Phone:   | 0      | 00/99 | 0<br>250         |
| MAR | ASIS | Ticks and Lyme Disease in Eastern National Parks                         | Ginsberg, Dr. H. S.<br>Rutgers University<br>Center for Coastal & Environmental Studies<br>New Brunswick, NJ<br>08903 Phone: (219)324-882 | 0      | 00/99 | 70,000<br>35,000 |
| MAR | ASIS | Monitoring of Completed Coastal Projects - South Jetty, Ocean City Inlet | Grosskopf, Mr. W. G.<br>Offshore and Coastal Technologies<br>510 Spencer Rd.<br>Avondale, PA<br>19311 Phone: (215)268-0410                | 80     | 09/90 | 0<br>0           |
| MAR | ASIS | Freshwater Pond Monitoring   | Hoyer, Dr. L. C.<br>Wilde Lake High School<br>5460 Trumpeter Rd.<br>Columbia, MD<br>21044 Phone: (301)730-5607                            | 0      | 00/99 | 0<br>300         |
| MAR | ASIS | Biology of Assateague Ponies   | Keiper, Dr. R. R.<br>Penn State University<br>Department of Biology<br>Mont Alto, PA<br>17237 Phone: (717)749-3111                        | 0      | 06/75 | 0<br>1,000       |

| Reg | Park | Project Title                              | Investigator/Address/Phone  | % done | End   | NPSS/Other\$   |
|-----|------|--|---|--------|-------|----------------|
| MAR | ASIS | Chemical Fertility Control of Feral Horses | Kirkpatrick, Dr. J. F.<br>Eastern Montana College<br>Department of Biological Sciences<br>Billings, MT<br>59101 Phone: (406)657-2342                  | 90     | 09/90 | 2,000<br>4,000 |
| MAR | ASIS | Water Quality Monitoring                   | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 75     | 10/90 | 27,000<br>0    |
| MAR | ASIS | Clam Population Monitoring                 | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 500<br>0       |
| MAR | ASIS | Shorebird Population Monitoring            | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 1,000<br>0     |
| MAR | ASIS | Feral Horse Population Monitoring          | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 1,000<br>0     |

| Reg | Park | Project Title                      | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|------------------------------------|---|--------|-------|---------------|
| MAR | ASIS | Gypsy Moth Monitoring              | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 200<br>0      |
| MAR | ASIS | Marine Debris Survey               | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 20     | 12/93 | 0<br>5,000    |
| MAR | ASIS | Colonial Breeding Bird Monitoring  | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 1,000<br>0    |
| MAR | ASIS | Wetland Mitigation Monitoring      | Kumer, Mr. J.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443 | 0      | 00/99 | 2,000<br>0    |
| MAR | ASIS | Saltmarsh Mosquito Migration Study | Lesser, C. R.<br>Maryland Department of Agriculture<br>Mosquito Control Division<br>Rt. 5 Box 236<br>Salisbury, MD                                    | 10     | 00/99 | 0<br>500      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
|     |      |   | 21801 Phone: (301)543-6626  |        |       |                |
| MAR | ASIS | Ixodes Ticks and Borrelia burgdorferi in the Southeastern United States                                 | Oliver, Dr. J. H.<br>Georgia Southern University<br>Institute of Arthropodology<br>L.B. 8042, Biology Department<br>Statesboro, GA<br>30460-8042 Phone: (912)681-5564 | 83     | 06/90 | 0<br>0         |
| MAR | ASIS | Photo Monitoring  | Olson, Mr. G. C.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt.2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443               | 0      | 00/99 | 0<br>0         |
| MAR | ASIS | Meteorological Observations   | Olson, Mr. G. C.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt. 2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443              | 0      | 00/99 | 750<br>0       |
| MAR | ASIS | Natural History Observations  | Olson, Mr. G. C.<br>Division of Resources Management<br>Assateague Island National Seashore<br>Rt.2 Box 294<br>Berlin, MD<br>21811 Phone: (301)641-1443               | 0      | 00/99 | 500<br>0       |
| MAR | ASIS | Distribution of Submerged Aquatic Vegetation in the Chesapeake Bay and Tributaries and Chincoteague Bay | Orth, Dr. R. J.<br>College of William and Mary<br>Virginia Inst. of Marine Science<br>School of Marine Science  | 0      | 00/99 | 0<br>0         |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
|     |      |   | Gloucester Point, VA<br>23062 Phone: (804)642-7000  |        |       |                |
| MAR | ASIS | Flight Behavior of Peregrine Falcons                                      | Pennycuik, Dr. C.<br>University of Miami<br>Department of Biology<br>P.O. Box 249118<br>Coral Gables, FL<br>33124 Phone:                | 90     | 12/89 | 0<br>200       |
| MAR | ASIS | Nutrient Dynamics in <i>Spartina alterniflora</i> -<br>Effects of Grazing | Rebach, Dr. S.<br>University of MD - Eastern Shore<br>Department of Natural Sciences<br>Princess Anne, MD<br>21853 Phone: (301)651-2200 | 99     | 01/90 | 1,102<br>6,450 |
| MAR | ASIS | Fertility, Dominance, and Herd Cohesion in<br>Feral Horses                | Rutberg, Dr. A. T.<br>Vassar College<br>Department of Biology<br>Poughkeepsie, NY<br>12601 Phone: (914)437-7311                         | 100    | 08/89 | 0<br>250       |
| MAR | ASIS | Autumn Peregrine Falcon Migration Survey                                  | Ward, Dr. F. P.<br>U.S. Army Chemical Research Center<br>SMCCR-RSB<br>Aberdeen Proving Grd, MD<br>21010-5423 Phone: (301)671-2586       | 0      | 00/99 | 0<br>25,000    |
| MAR | ASIS | Effects of Simulated Grazing  | Zervanos, S. M.<br>Penn State University<br>P.O. Box 7009<br>Reading, PA<br>19610 Phone: (215)320-4875                                  | 90     | 11/88 | 0<br>1,100     |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MAR | BOWA | Floral Survey of Booker T. Washington National Monument   | Critz, R.<br>Virginia Western Community College<br>Department of Biology<br>Colonial Avenue<br>Roanoke, VA<br>24015 Phone: (703)774-4518 | 0      | 00/99 | 0<br>0        |
| MAR | BOWA | Floral Survey at Booker T. Washington, N.M.               | Mengak, F. K.<br>Gerrum College<br>Division of Life Sciences<br>Garber Hall<br>Ferrum, VA<br>24088 Phone: (703)365-4387                  | 85     | 12/90 | 0<br>0        |
| MAR | COLO | Biomonitoring of Air Pollutants, Resource Study Proposal  | Bennett, Dr. J.<br>WASO-AIR, FRSP<br>George Mason University<br>Denver, CO<br>Phone: (000)327-2814                                       | 0      | 00/99 | 500<br>0      |
| MAR | COLO | Develop Open Fields Management Plan                       | Daniels, G.<br>Colonial National Historical Park<br>P.O. Box 210<br>Yorktown, PA<br>23690 Phone: (000)827-8000                           | 0      | 00/99 | 3,000<br>500  |
| MAR | COLO | Prepare Plan for Park Based Geographic Information System | DeVine, Dr. H.<br>Colonial National Historical Park<br>P.O. Box 210<br>Yorktown, VA<br>23690 Phone: (000)827-8000                        | 0      | 00/99 | 2,200<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| MAR | COLO | Develop Fire and Vegetation Classification System               | Devine, Dr. H.<br>North Carolina State University<br>School of Forestry<br>P.O. Box 8008<br>Raleigh, NC<br>27695-8004 Phone: (919)737-0327 | 0      | 00/99 | 13,400<br>7,337 |
| MAR | COLO | Chesapeake Bay Shoreline Study                                  | Hardaway, S.<br>College of William & Mary<br>Institute of Marine Science<br>Gloucester Point, VA<br>23062 Phone: (804)642-7277             | 0      | 03/91 | 0<br>4,200      |
| MAR | COLO | Develop Air Quality Management Plan                             | Hauge, E.<br>Denver Service Center<br>National Park Service<br>P.O. Box 25287<br>Denver, CO<br>80225 Phone: (303)236-8729                  | 0      | 00/99 | 4,500<br>200    |
| MAR | COLO | Groundwater Investigation of Jamestown Island Glasshouse Site   | Johnson, Dr. G.<br>College of William and Mary<br>Geology Department<br>Williamsburg, VA<br>23145 Phone: (804)221-2444                     | 0      | 12/92 | 0<br>1,200      |
| MAR | COLO | Stratigraphy and Paleontology of Passamore Creek, Jamestown Is. | Johnson, Dr. G.<br>College of William and Mary<br>Department of Geology<br>Williamsburg, VA<br>23185 Phone: (804)221-2444                  | 0      | 06/90 | 0<br>750        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MAR | COLO | Inventory of Rare, Threatened and Endangered Species  | Lipford, M. L.<br>VA Dept. of Conservation and Rec<br>Natural Heritage Program<br>203 Governor Street, Suite 402<br>Richmond, VA<br>23219 Phone: (000)000-0000 | 15     | 03/92 | 0<br>0        |
| MAR | COLO | Groundwater Nutrient Study  | MacIntyre, Dr. W.<br>College of William and Mary<br>VA Institute of Marine Science<br>Gloucester Point, VA<br>23185 Phone: (804)642-7232                       | 0      | 08/90 | 0<br>5,000    |
| MAR | COLO | Measurement of Nitrogen Inputs to Chesapeake Bay and its Tributaries from Groundwater Sources | MacIntyre,, Dr. W.<br>College of William & Mary,<br>VA Institute of Marine Science<br>Gloucester Point, VA<br>23185 Phone: (804)642-7232                       | 0      | 08/92 | 0<br>10,000   |
| MAR | COLO | Gypsy Moth Monitoring   | Rafkind, Mr. C.<br>Colonial National Historical Park<br>P.O. Box 210<br>Yorktown, VA<br>23690 Phone: (000)827-8000   | 0      | 00/99 | 300<br>100    |
| MAR | COLO | Mosquito, Tick Monitoring   | Rindfleisch, J.<br>York Co. Mosquito Control<br>P.O. Box 532<br>Yorktown, VA<br>23690 Phone: (804)898-0135   | 0      | 12/95 | 0<br>1,000    |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| MAR | COLO | Develop Complex Fire Management Plan   | Segar, J.<br>Colonial National Historical Park<br>P.O. Box 210<br>Yorktown, VA<br>23690 Phone: (008)227-8000                                | 0      | 00/99 | 8,000<br>0   |
| MAR | COLO | Bateriological Monitoring of Public Water Systems  | Whiteman, B.<br>Colonial National Historic Park<br>P.O. Box 210<br>Yorktown, VA<br>23690 Phone: (999)827-8000                               | 0      | 00/99 | 2,500<br>0   |
| MAR | DEWA | Proposed radiotelemetry study of wintering bald eagles in the Delaware Water Gap National Recreation Area.   | Ambler, Mr. A. J.<br>East Stroudsburg University<br>Department of Biological Sciences<br>East Stroudsburg, PA<br>18301 Phone: (717)424-3714 | 10     | 03/92 | 0<br>5,700   |
| MAR | DEWA | Restoration of American Shad to the Susquehanna River  | Arnold, Mr. D.<br>Pennsylvania Fish Commission<br>Bushkill, PA<br>18324 Phone: (717)588-6388  | 100    | 06/89 | 0<br>11,780  |
| MAR | DEWA | Small Mouth Bass Survey: Delaware River<br>Walleye Survey: Delaware River  | Arnold, Mr. D.<br>Pennsylvania Fish Commission<br>Bushkill, PA<br>18324 Phone: (717)588-6388  | 0      | 00/99 | 0<br>0       |
| MAR | DEWA | Routine stream survey of Toms, Hornbecks, Dingmans, Adams, and Raymondskill Creeks in DEWA for possible inclusion into PA's catchable trout program and or other management actions. | Arnold, Mr. D. A.<br>Pennsylvania Fish Commission<br>Bushkill, PA<br>18324 Phone: (717)588-6388   | 50     | 00/99 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MAR | DEWA | Habitat Requirements of larval, sub-yearling, and spawning American Shad (Alosa sapidissima)                                       | Backman, Mr. T. W.<br>U.S. Fish and Wildlife Service<br>Natl. Fishery Research & Dev. Lab<br>R.D. #4, Box 63<br>Wellsboro, PA<br>16901 Phone: | 10     | 12/93 | 0<br>18,000   |
| MAR | DEWA | Statistical Analysis of Historic Water Quality Data from the Middle Delaware Scenic and Recreational River                         | Breidt, Mr. F. J.<br>Colorado State University<br>Department of Statistics<br>Fort Collins, CO<br>80523 Phone:                                | 100    | 09/89 | 15,000<br>0   |
| MAR | DEWA | Soil Borings of the Delaware River   | Chapman, Mr. R.<br>Hartman Engineering<br>4910 Ransom Rd<br>Clarence, NY<br>14031-2114 Phone:   | 100    | 09/89 | 0<br>0        |
| MAR | DEWA | CAPS: Cooperative Agricultural Pest Survey   | Denholm, Mr. T. B.<br>New Jersey Dept. of Agriculture<br>Division of Plant Industry<br>CN-330<br>Trenton, NJ<br>08625 Phone: (609)292-5440    | 100    | 09/89 | 0<br>279,000  |
| MAR | DEWA | Wild Turkey Research P-R Project W-64-R<br>Study I-B Trap and Transfer Wild Turkeys<br>Study I-C Wild Turkey Population Evaluation | Eriksen, Mr. R. E.<br>NJ Divison of Fish, Game & Wildlife<br>RD 3 Box 409<br>Hampton, NJ<br>08827 Phone: (201)735-8793                        | 95     | 07/90 | 0<br>12,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| MAR | DEWA | Response of Six NJ Lakes to the Effects of Acidic Deposition on Surface and Ground Water Chemistry                     | Faust, Dr. S. D.<br>Rutgers University<br>Cook College<br>Dept. of Environmental Sciences<br>New Brunswick, NJ<br>08903 Phone: (201)932-8013                      | 75     | 05/90 | 0<br>56,441      |
| MAR | DEWA | Sampling selected Northwestern New Jersey Habitats for the Presence of Water Shrew, Rock Vole and Mt. Dusky Salamander | FitzGerald, Dr. R. G.<br>Montclair State College<br>RD 2 Box 272<br>Branchville, NJ<br>07826 Phone: (201)948-7649   | 98     | 10/89 | 0<br>5,000       |
| MAR | DEWA | Ecological and Genetic Studies of Blue-Winged and Golden-Winged Warblers   | Gill, Dr. F. B.<br>Academy of Natural Sciences<br>19th Street and the Parkway<br>Philadelphia, PA<br>19103 Phone:   | 50     | 06/90 | 0<br>1,000       |
| MAR | DEWA | Ticks and Lyme disease in National Parks of the Eastern United States  | Ginsberg, Dr. H. S.<br>Rutgers University<br>Center for Coastal and Env Studies<br>BooLITTLE Hall-Busch Campus<br>New Brunswick, NJ<br>08903 Phone: (201)932-4882 | 0      | 00/99 | 70,000<br>35,000 |
| MAR | DEWA | Health and Vigor of Red Spruce in the Kittatinny Ridge   | Glenn, Dr. M.<br>Seton Hall University<br>Biology Department<br>South Orange, NJ<br>07079 Phone: (201)408-3550  | 25     | 09/90 | 0<br>28,120      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$   |
|-----|------|--|---|--------|-------|------------------|
| MAR | DEWA | 1989 Upper Delaware Summer Limnological Program                                      | Johnson, Ms. E. A.<br>National Park Service-DEWA<br>Star Route 38<br>Milford, PA<br>18337 Phone: (717)296-6952                      | 25     | 00/99 | 8,000<br>10,000  |
| MAR | DEWA | Roads and Trails Survey of the Delaware Water Gap NRA                                | Johnson, Ms. E. A.<br>National Park Service<br>Delaware Water Gap NRA<br>Star Route 38<br>Milford, PA<br>18337 Phone: (717)296-6952 | 60     | 09/90 | 24,000<br>6,000  |
| MAR | DEWA | Survey Adjacent Land Uses and Develop Water Resources Management Plan                | Johnson, Ms. E. A.<br>National Park Service<br>Delaware Water Gap NRA<br>Star Route 38<br>Milford, PA<br>18337 Phone: (717)296-6952 | 65     | 12/90 | 44,000<br>30,000 |
| MAR | DEWA | Evaluation of Northern Goshawk Breeding Habitat in Pennsylvania                      | Kimmel, Mr. J. T.<br>Penn State University<br>205 Forest Resources Lab<br>University Park, PA<br>16802 Phone:                       | 25     | 05/92 | 0<br>2,500       |
| MAR | DEWA | Delaware River American Shad Population Estimate Juvenile American Shad Outmigration | Lupine, Mr. A. J.<br>NJ Freshwater Fisheries Laboratory<br>P.O. Box 394<br>Lebanon, NJ<br>08833 Phone:                              | 0      | 00/99 | 0<br>30,000      |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| MAR | DEWA | Resource Impacts at Delaware Water Gap NRA:<br>Evaluation of Impacts, Their Causes,<br>Recovery Rates and Potential Management. | Marion, Dr. J.<br>National Park Service<br>Cooperative Park Studies Unit<br>Virginia Tech, Dept. of Forestry<br>Blacksburg, VA<br>24061 Phone: (703)231-6603 | 85     | 08/91 | 2,000<br>0   |
| MAR | DEWA | Caddis Fly Survey for Pennsylvania  | Masteller, Dr. E. C.<br>Penn State-The Behrend College<br>Division of Science, Eng. & Tech.<br>Station Road<br>Erie, PA<br>16563-0203 Phone: (814)898-6404   | 35     | 12/91 | 0<br>13,000  |
| MAR | DEWA | Upland Wildlife and Furbearer Research-Black<br>Bear Distribution and Population Trends   | McConnell, Ms. P. A.<br>NJ Div. of Fish, Game, & Wildlife<br>Northern District Office<br>Box 383 RR 1<br>Hampton, NJ<br>08827 Phone: (201)735-7040           | 0      | 00/99 | 0<br>10,500  |
| MAR | DEWA | The Development of a Rural Landscape<br>Management Plan for Delaware Water Gap<br>National Recreation Area                      | Melnick, Mr. R. Z.<br>Land and Community Associates<br>P.O. Box 92<br>Charlottesville, VA<br>29901 Phone: (804)295-3880                                      | 60     | 10/90 | 30,000<br>0  |
| MAR | DEWA | Determination of the current status,<br>maintenance and enhancement of bald eagle<br>populations in New York State.             | Nye, Dr. P.<br>NY Dept of Env. Conservation<br>Wildlife Resources Center<br>Delmar, NY<br>12054 9767 Phone:  | 0      | 00/99 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NP\$\$/Other\$  |
|-----|------|--|--|--------|-------|-----------------|
| MAR | DEWA | Pennsylvania Breeding Bird Atlas Project   | Schmidt, Mr. C. R.<br>P.O. Box 549<br>Delaware Water Gap, PA<br>18327 Phone: (717)992-5807   | 100    | 08/89 | 0<br>35,000     |
| MAR | DEWA | Significant Ecological Features of the Steamtown National Historic Site and Rail Corridor to the Delaware Water Gap CA # CA4000-9-8009 | Smith, Mr. T. L.<br>The Nature Conservancy<br>34 Airport Drive<br>Middletown, PA<br>17057 Phone: (717)948-3962                                       | 85     | 12/89 | 27,056<br>0     |
| MAR | DEWA | Pike County Natural Areas Inventory  | Smith, Mr. T. L.<br>The Nature Conservancy<br>34 Airport Drive<br>Middletown, PA<br>17057 Phone: (717)948-3692                                       | 90     | 01/90 | 0<br>35,000     |
| MAR | DEWA | VIP Wildlife Research  | Spencer, Mr. C. R.<br>119 Walnut Street<br>Bloomfield, NJ<br>07003 Phone:  | 20     | 00/99 | 0<br>0          |
| MAR | DEWA | Growth rates and interdegradation of the Eastern Painted Turtle, and the Midland Painted Turtle, in northwestern New Jersey            | Stein, Mr. R. J.<br>Biostar Associates Inc.<br>RFD Box 165<br>Far Hills, NJ<br>07931 Phone: (201)234-0870  | 65     | 00/99 | 0<br>0          |
| MAR | DEWA | Analysis of Hunter Economics, Socio-Demographic, and Attitudinal Attributes, Delaware Water Gap National Recreation Area.              | Strauss, Dr. C. H.<br>Penn State University<br>104 Ferguson Bldg.<br>School of Forest Resources<br>University Park, PA<br>16802 Phone: (814)865-4574 | 100    | 12/89 | 35,000<br>7,500 |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| MAR | DEWA | Monroe County Surface Water Study 1989  | Surma, Ms. L.<br>Monroe County Planning Commission<br>Monroe County Courthouse<br>Stroudsburg, PA<br>18360 Phone: (717)894-8490                | 70     | 03/90 | 0<br>13,000  |
| MAR | DEWA | Hemlock Woolly Adelgid  | Ward, Mr. R. C.<br>NJ Dept. of Agriculture<br>P.O. Box 281<br>Mendham, NJ<br>07945 Phone:  | 0      | 00/99 | 0<br>20,000  |
| MAR | DEWA | Appropriate River Recreation Use Project,<br>Managerial Component-Managerial Perspectives<br>on Appropriate River Use | Wellman, Dr. J. D.<br>VA Tech. & State University<br>School of Forestry & Wldlf Resources<br>Blacksburg, VA<br>24061 Phone:                    | 100    | 01/89 | 0<br>2,000   |
| MAR | DEWA | Delaware Water Gap Raptor Banding Station   | Yoson, Mr. J. W.<br>494 C Ludlow Station Rd.<br>Asbury, NJ<br>08802 Phone:   | 0      | 12/89 | 0<br>400     |
| MAR | DEWA | Status and Distribution of New Jersey's<br>"Endangered" Bog Turtle  | Zappolorti, Mr. R. T.<br>Herpotological Associates<br>Phone: (201)349-5065   | 100    | 11/89 | 0<br>0       |
| MAR | DIPA | Exotic Species Removal  | Smith, Mr. C.<br>National Park Service<br>Fort Necessity National Battlefield<br>RD 2, Box 528<br>Farmington, PA<br>15437 Phone: (412)329-5512 | 0      | 00/99 | 400<br>1,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MAR | FOMC | Integrated Pest Management Program for Landscapes in National Parks of the Mid-Atlantic Region | Raupp, M. J.<br>University of Maryland<br>Department of Entomology<br>College Park, MD<br>20742 Phone:  | 0      | 00/99 | 0<br>0        |
| MAR | FONE | Meadow/Forest Pollen Study   | Kelso, Dr. G.<br>National Park Service<br>Eastern Arch. Field Lab.<br>Charlestown Naval Shipyard, Bldg 28<br>Boston, MA<br>02129 Phone: (617)242-1979 | 20     | 12/93 | 100<br>500    |
| MAR | FONE | Gypsy Moth Survey  | Onken, De. B. P.<br>Dept. of Agriculture<br>U.S. Forest Service<br>180 Canfield Street<br>Onken, WV<br>26505 Phone:                                   | 20     | 00/99 | 500<br>1,400  |
| MAR | FONE | Ohio River Basin Ground Water Network  | Siwicki, Mr. R.<br>U.S. Geological Survey<br>Water Resources Division<br>1000 Liberty Ave.<br>Pittsburgh, PA<br>15222 Phone:                          | 60     | 00/99 | 50<br>13,700  |
| MAR | FONE | Restoration of Historic Scene  | Smith, Mr. C.<br>National Park Service<br>Fort Necessity National Battlefield<br>RD 2, Box 528<br>Farmington, PA<br>15437 Phone: (412)329-5512        | 10     | 00/99 | 300<br>400    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| MAR | FONE | Integrated Pest Management  | Smith, Mr. C.<br>National Park Service<br>Fort Necessity National Battlefield<br>RD 2, Box 528<br>Farmington, PA<br>15437 Phone: (412)329-5512                | 0      | 00/99 | 100<br>0         |
| MAR | FRHI | Vegetation Survey   | Abrams, Dr. M.<br>The Pennsylvania State University<br>School of Forest Resources<br>4 Ferguson Building<br>University Park, PA<br>16802 Phone: (814)865-4901 | 75     | 06/90 | 9,000<br>0       |
| MAR | FRHI | Field Trial of Sodium Carbonate Injection to Abate Acid Discharges from an Underground Mine -- Parcel 3 | Aljoe, W. W.<br>U.S. Bureau of Mines<br>P.O. Box 18070<br>Pittsburgh, PA<br>15236 Phone: (412)892-6569  | 70     | 09/90 | 0<br>25,000      |
| MAR | FRHI | Evaluation and Installation of a Wetland for Treatment of Acid Mine Drainage Water                      | McIntire, P. E.<br>U.S. Bureau of Mines<br>P.O. Box 18070<br>Pittsburgh, PA<br>15236 Phone: (412)892-6539   | 80     | 09/91 | 25,000<br>20,000 |
| MAR | FRHI | Gypsy Moth Detection/Monitoring Program   | Schneeberger, N.<br>USDA Forest Service<br>Forest Pest Management<br>180 Canfield Street<br>Morgantown, WV<br>26505 Phone: (304)291-4133                      | 0      | 00/99 | 300<br>200       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$  |
|-----|------|--|---|--------|-------|-----------------|
| MAR | GETT | Ground Water Flow Systems and Water Quality of Gettysburg area, PA                                     | Becher, A. E.<br>U.S. Geological Survey, WRD<br>4th Floor, Federal Building<br>P.O. Box 1107<br>Harrisburg, PA<br>17108 Phone: (717)782-3421              | 100    | 12/89 | 0<br>0          |
| MAR | GETT | Identification, Restoration, and Maintenance of Historic Woodlots at Gettysburg National Military Park | Cavanaugh, C. M.<br>Pennsylvania State University<br>School of Forest Resources<br>Ferguson Building<br>University Park, PA<br>16802 Phone: (814)865-1602 | 30     | 08/90 | 12,000<br>1,020 |
| MAR | GETT | Acid Deposition effects on bronze and marble monuments and statues at GETT                             | Dolske, D. A.<br>Illinois Department of Energy & NR<br>State Water Survey Division<br>2204 Griffith Drive<br>Champaign, IL<br>61820 Phone: (217)333-7858  | 90     | 06/90 | 20,000<br>0     |
| MAR | GETT | Survey of Amphibians and reptiles of Gettysburg  | Hulse, A. C.<br>Indiana University of Pennsylvania<br>Department of Biology<br>Indiana, PA<br>15705 Phone: (412)357-2279                                  | 100    | 06/89 | 0<br>150        |
| MAR | GETT | Dogwood Anthracnose Survey   | Jackson, W.<br>USDA, Forest Service<br>180 Canfield Street<br>Morgantown, WV<br>26505 Phone: (304)291-4133  | 0      | 00/99 | 0<br>400        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| MAR | GETT | Ecological Consequences of Ash Decline and Relationship of Disease to Drought                         | Leopold, D. J.<br>State University of New York<br>College of Environmental Sciences<br>and Forest Biology<br>Syracuse, NY<br>13210 Phone: (315)470-6784 | 100    | 09/89 | 0<br>47,387     |
| MAR | GETT | Ground Water Quality Monitoring   | McNulty-Huffman, D. C.<br>NPS, Gettysburg National Mil. Park<br>Gettysburg National Military Park<br>Gettysburg, PA<br>17325 Phone: (717)334-0909       | 0      | 00/99 | 7,000<br>0      |
| MAR | GETT | Status and Habitat Requirements of Great Horned Owls in Pennsylvania                                  | Morreli, T.<br>Pennsylvania State University<br>Forest Resources Lab<br>University Park, PA<br>16802 Phone: (814)863-3201                               | 98     | 06/90 | 0<br>0          |
| MAR | GETT | Integrated Pest Management Programs for Landscapes in National Parks in the Mid-Atlantic Region       | Raupp, M. J.<br>University of Maryland<br>Department of Entomology<br>College Park, MD<br>20742 Phone: (301)454-2688                                    | 80     | 06/90 | 20,000<br>6,000 |
| MAR | GETT | Environmental assessment of Pesticide Use on Agricultural Lands at Gettysburg National Military Park. | Stonesifer, K. J.<br>Penn State University<br>R.D. #1, Box 64<br>Julian, PA<br>16844 Phone: (814)692-8750   | 100    | 12/89 | 600<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| MAR | GETT | Plant community development in historic woodlots in Gettysburg National Military Park                     | Storm, G. L.<br>U.S. Fish and Wildlife Service<br>PA Coop. Fish & Wildlife Res. Unit<br>PSU, 7 Ferguson Building<br>University Park, PA<br>16802 Phone: (814)865-4511 | 5      | 09/91 | 500<br>0       |
| MAR | GETT | Population status, movements, habitat use, and impact of white-tailed deer at GNMP and ENHS, Pennsylvania | Storm, G. L.<br>U.S. Fish & Wildlife Service<br>PA Coop. Fish & Wildlife Res. Unit<br>PSU, 7 Ferguson Building<br>University Park, PA<br>16802 Phone: (814)865-4511   | 100    | 12/89 | 1,000<br>6,000 |
| MAR | GETT | Gypsy Moth Survey   | Whiteman, R.<br>USDA, Forest Service<br>180 Canfield Street<br>Morgantown, WV<br>26505 Phone: (304)291-4133   | 0      | 00/99 | 0<br>500       |
| MAR | GETT | Flora Inventory and Vegetative Cover Type Mapping of Gettysburg National Military Park                    | Yahner, R. H.<br>Pennsylvania State University<br>School of Forest Resources<br>University Park, PA<br>16802 Phone: (814)863-3201                                     | 90     | 06/90 | 0<br>5,000     |
| MAR | GEWA | Deer Survey (Spotlight)   | George Washington Birthplace and National Monument/Thomas Stone NHS<br>R.R.#1, Box 717<br>Washington's Birthpl, VA<br>22443 Phone: (804)224-1732                      | 66     | 04/90 | 200<br>0       |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MAR | GEWA | Erosion Monitoring of Potomac River Bank                                 | George Washington Birthplace Nat'l Monument/Thomas Stone Nat'l HS<br>R.R.#1, Box 717<br>Washington's Birthpl, VA<br>22575 Phone: (804)224-1732 | 100    | 00/99 | 25<br>0       |
| MAR | GEWA | Monitor spread and eradication of Phragmites, (alien species)            | George Washington's Birthplace Natl Monument/Thomas Stone NHS<br>R.R.#1, Box 717<br>Washington's Birthpl, VA<br>22575 Phone: (804)224-1732     | 0      | 00/99 | 150<br>0      |
| MAR | GEWA | White-Tail Deer Research (Abomasal Parasite Count)                       | Brock, Mr. S.<br>VA Dept of Game & Inland Fisheries<br>5682-A Mooretown Road<br>Williamsburg, VA<br>23185 Phone: (804)253-7058                 | 100    | 12/89 | 100<br>1,367  |
| MAR | GEWA | Collection of Harvest Data on White-Tailed Deer                          | Brock, Mr. S.<br>VA Dept of Game & Inland Fisheries<br>5682-A Mooretown Road<br>Williamsburg, VA<br>23185 Phone: (804)253-7058                 | 90     | 01/90 | 50<br>300     |
| MAR | GEWA | Monitor Nesting Bald Eagles within the park and Protect the Nesting Site | Byrd, Dr. M.<br>College of William and Mary<br>Williamsburg, VA<br>23186 Phone: (804)253-4240  | 0      | 00/99 | 100<br>300    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|--|---|--------|-------|----------------|
| MAR | GEWA | Inventory of Rare, Threatened and Endangered Species   | Clampitt, Mr. C.<br>VA Natural Heritage Program<br>203 Governor Street, Suite 402<br>Richmond, VA<br>23219 Phone: (804)786-7951 | 0      | 10/91 | 0<br>0         |
| MAR | GEWA | Estuarine Research Reserve System  | Curtis, C.<br>VA Institute of Marine Science<br>Gloucester Point, VA<br>23062 Phone: (804)642-7156                              | 85     | 09/90 | 2,371<br>1,504 |
| MAR | GEWA | Inventory of Age, Class and Tree Species of Dancing Marsh                                      | Knoeller, C. H.<br>Department of Forestry<br>P.O. Box 304<br>Montross, VA<br>22520 Phone: (804)493-9440                         | 100    | 09/89 | 50<br>175      |
| MAR | GEWA | Gypsy Moth Pheromone Trapping  | Leonard, Ms. D. S.<br>USDA Forest Service, FPM<br>P.O. Box 2680<br>Asheville, NC<br>28802 Phone: (704)257-4329                  | 0      | 09/00 | 75<br>100      |
| MAR | GEWA | A Study of Recent Vegetative Changes in Pope's Creek Marsh                                     | Wilcox-Koepfler, J.<br>9320 S.P.I.D. #1808<br>Corpus Christi, TX<br>78418 Phone: (512)749-6798                                  | 100    | 06/89 | 200<br>200     |
| MAR | HAMP | Integrated Pest Management Program for Landscapes in National Parks of the Mid-Atlantic Region | Raupp, M. J.<br>University of Maryland<br>Department of Entomology<br>College Park, MD<br>20742 Phone:                          | 0      | 06/90 | 0<br>0         |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| MAR | HOFU | White-tailed Deer Monitoring   | Stone, R.<br>Hopewell-Furnace NHS<br>RD1, Box 345<br>Elverson, PA<br>19520 Phone: (215)582-8773            | 100    | 12/89 | 500<br>0       |
| MAR | HOFU | Apple Orchard Pest Monitoring  | Stone, R.<br>Hopewell-Furnace NHS<br>RD1, BOX 345<br>Elverson, PA<br>19520 Phone: (215)582-8773            | 100    | 09/89 | 800<br>0       |
| MAR | HOFU | Alien Vegetation Control   | Stone, R.<br>Hopewell-Furnace NHS<br>RD1, BOX 345<br>Elverson, PA<br>19520 Phone: (215)582-8773            | 100    | 09/89 | 1,200<br>0     |
| MAR | HOFU | Vegetation Monitoring  | Stone, R.<br>Hopewell-Furnace NHS<br>RD1, BOX 345<br>Elverson, PA<br>19520 Phone: (215)582-8773            | 35     | 12/90 | 0<br>0         |
| MAR | MONI | Reintroduction of Running Buffalo Clover<br>(TRIFOLIUM STOLONIFERUM) | McDonald, Mr. B.<br>WV Natural Heritage Program<br>P.O. BOX 67<br>Elkins, WV<br>26241 Phone: (304)636-1767 | 100    | 06/89 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$   |
|-----|------|--|---|--------|-------|----------------|
| MAR | MONI | Geographic Information System Development  | Riddle, Ms. M.<br>National Park Service<br>Denver Service Center<br>12795 W. Alameda Parkway<br>Denver, CO<br>80225-0287 Phone: (303)969-2412 | 100    | 12/89 | 8,000<br>0     |
| MAR | MONI | Monitoring of Gypsy Moth Populations on the New Jersey side of the Delaware Water Gap National Recreation Area | Troutman, Mr. T. J.<br>National Park Service<br>Delaware Water Gap NRA<br>NJ District Office<br>Bushkill, PA<br>18324 Phone: (201)948-6500    | 0      | 00/99 | 1,000<br>0     |
| MAR | NERA | Long-Term Ecological Monitoring in the New River, Water Quality Monitoring at 5 Stations in the New River      | McCoy, Dr. E.<br>WV Division of Water Resources<br>1201 Greenbrier Street<br>Charleston, WV<br>25311 Phone: (304)348-2107                     | 95     | 01/90 | 3,500<br>0     |
| MAR | NERI | Unsteady Flow Solute Transport Study   | Appel, Mr. D.<br>U.S. Geological Survey<br>Water Resources Division<br>603 Morris Street<br>Charleston, WV<br>25301 Phone: (304)347-5131      | 80     | 09/90 | 0<br>40,000    |
| MAR | NERI | Long-Term Ecological Monitoring in the New River, Operate 4 Parameter Water Quality Monitors at 2 Stations.    | Appel, Mr. D.<br>U.S. Geological Survey<br>Water Resources Division<br>603 Morris Street<br>Charleston, WV<br>25301 Phone: (304)347-5131      | 40     | 09/91 | 5,000<br>3,000 |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| MAR | NERI | Gypsy Moth Monitoring at New River Gorge National River                                   | Buermeyer, Mr. K.<br>U.S.D.A. - Forest Service<br>AIPM Project Office<br>P.O. Box 2208<br>Elkins, WV<br>26241 Phone: (304)636-3803 | 0      | 00/99 | 0<br>837        |
| MAR | NERI | Vegetation Map of the New River Gorge National River                                      | Duncan, Ms. N.<br>NPS-GIS Division<br>P.O. Box 25287<br>Denver, CO<br>80225-0287 Phone: (303)969-2590                              | 100    | 12/89 | 1,000<br>0      |
| MAR | NERI | West Virginia Mammal Survey   | Hight, Dr. M.<br>Department of Biological Sciences<br>Marshall University<br>Huntington, WV<br>25755 Phone: (304)696-6692          | 65     | 12/91 | 2,000<br>13,000 |
| MAR | NERI | Appropriate River Recreation Use Project, Ecological Component-Resource Impact Assessment | Marion, Dr. J.<br>Cooperative Park Studies Unit<br>Virginia Tech Dept of Forestry<br>Blacksburg, VA<br>24061 Phone: (703)231-6603  | 95     | 02/90 | 2,000<br>0      |
| MAR | NERI | Monitor Water Quality Standards - Fecal Coliform  | McCoy, Dr. E.<br>WV Division of Water Resources<br>1201 Greenbrier Street<br>Charleston, WV<br>25311 Phone: (304)348-2107          | 80     | 06/90 | 2,700<br>0      |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| MAR | NERI | Monitor Water Quality Standards -<br>Conventional Pollutant Sampling               | McCoy, Dr. E.<br>WV Division of Water Resources<br>1201 Greenbrier Street<br>Charleston, WV<br>25311 Phone: (304)348-2107 | 70     | 06/90 | 3,400<br>0      |
| MAR | NERI | Long-Term Ecological Monitoring in the New<br>River, Priority Pollutant Monitoring | McCoy, Dr. E.<br>WV Division of Water Resources<br>1201 Greenbrier Street<br>Charleston, WV<br>25311 Phone: (304)348-2107 | 0      | 00/99 | 0<br>0          |
| MAR | NERI | Install Staff Gages and Develop Flow Curves<br>for New River Tributaries           | McCoy, Dr. E.<br>WV Division of Water Resources<br>1201 Greenbrier Street<br>Charleston, WV<br>25311 Phone: (304)348-2107 | 95     | 00/99 | 7,500<br>0      |
| MAR | NERI | Survey of Upland Vertebrates of New River<br>Gorge National River                  | McDonald, Mr. B.<br>WV Natural Heritage Program<br>P.O. Box 67<br>Elkins, WV<br>26241 Phone: (304)636-1767                | 20     | 06/92 | 20,000<br>4,000 |
| MAR | NERI | Management of Herbicide Spraying of<br>Powerline and Railroad Rights-of-Way        | Michael, Dr. E.<br>Forestry - West Virginia University<br>P.O. Box 6125<br>Morgantown, WV<br>26506 Phone: (304)293-4797   | 95     | 02/90 | 0<br>2,300      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| MAR | NERI | Long-Term Ecological Monitoring in the New River, Fisheries Component   | Orth, Dr. D.<br>VA Tech. & State University<br>Department of Fisheries & Wildlife<br>Blacksburg, VA<br>24061 Phone:                         | 40     | 07/91 | 25,000<br>0    |
| MAR | NERI | Quality of Drinking Water at NERI   | Pollio, Ms. C. A.<br>National Park Service<br>New River Gorge National River<br>P.O. Box 246<br>Glen Jean, WV<br>25846 Phone: (304)465-0508 | 10     | 00/00 | 140<br>0       |
| MAR | NERI | Revegetation of Unreclaimed Mine Sites, Native Seed Bank Project  | Pollio, Ms. C. A.<br>New River Gorge National River<br>P.O. Box 246<br>Glen Jean, WV<br>25846 Phone: (304)465-0508                          | 40     | 12/90 | 1,000<br>1,500 |
| MAR | NERI | Success of Wasp Traps at New River Gorge National River   | Pollio, Ms. C. A.<br>New River Gorge National River<br>P.O. Box 246<br>Glen Jean, WV<br>25846 Phone: (304)465-0508                          | 50     | 12/90 | 500<br>0       |
| MAR | NERI | Appropriate River Recreation Use Project, Managerial Component-Exploring the Potential Partnership Role of River Outfitters in Managing Public Rivers | Roggenbuck, Dr. J. W.<br>Department of Forestry<br>VA Tech. & State University<br>Blacksburg, VA<br>24061-0324 Phone: (703)231-7418         | 100    | 06/89 | 0<br>120       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MAR | NERI | Leaf-Off Aerial Photography - Natural Color   | Salazar, Mr. W.<br>USDA-Forest Service<br>Forest Pest Management<br>1720 Peachtree Street, NW<br>Atlanta, GA<br>30367 Phone: (404)347-2961 | 100    | 04/89 | 7,369<br>0    |
| MAR | NERI | Leaf-Off Aerial Photography - Color Infrared  | Salazar, Mr. W.<br>USDA-Forest Service<br>Forest Pest Management<br>1720 Peachtree Street, NW<br>Atlanta, GA<br>30367 Phone: (404)347-2961 | 100    | 04/89 | 8,853<br>0    |
| MAR | NERI | Reintroduction of the Peregrine Falcon<br>(FALCO PEREGRINUS)  | Stihler, Mr. C.<br>WV Department of Natural Resources<br>P.O. Box 67<br>Elkins, WV<br>26241 Phone: (304)636-1767                           | 70     | 10/91 | 0<br>17,500   |
| MAR | NERI | Using Secondary Production to Analyze the<br>Ecological Effects of Black Fly Pest<br>Management in the New River below Bluestone<br>Dam | Voshell, Jr., J. R.<br>VA Tech. & State University<br>Department of Entomology<br>Blacksburg, VA<br>24061 Phone: (703)231-5707             | 99     | 02/90 | 0<br>0        |
| MAR | NERI | Long-Term Ecological Monitoring in the New<br>River, Invertebrate Component   | Voshell, Jr., Dr. J. R.<br>Department of Entomology<br>VA Tech. & State University<br>Blacksburg, VA<br>24061 Phone: (703)231-5707         | 50     | 06/91 | 48,000<br>0   |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MAR | NERI | Appropriate River Recreation Use Project,<br>Managerial Component - Managerial<br>Perspectives on Appropriate River Use | Wellman, Dr. J. D.<br>VA Tech. & State University<br>School of Forestry & Wildlife Res.<br>Blacksburg, VA<br>24061 Phone: (703)231-6663               | 100    | 12/89 | 0<br>2,000    |
| MAR | NERI | West Virginia Breeding Bird Atlas Survey  | Worthington, Mr. G.<br>118 Clark Avenue<br>Fayetteville, WV<br>25840 Phone: (304)574-0540   | 99     | 08/89 | 0<br>250      |
| MAR | NERI | Inventory of Abandoned Coal and Gas<br>Operations in the New River Gorge National<br>River                              | Yuill, Mr. C.<br>Landscape Architecture<br>West Virginia University<br>1138 Agricultural Science Bldg<br>Morgantown, WV<br>26505 Phone: (304)293-2141 | 85     | 06/90 | 0<br>0        |
| MAR | PETE | Hazard Tree Removal   | Barat, C.<br>Petersburg NB<br>P.O. Box 549<br>Petersburg, VA<br>23804 Phone: (804)732-3531  | 70     | 00/99 | 19,115<br>0   |
| MAR | PETE | Tick Monitoring   | Barat, C.<br>Petersburg NB<br>P.O. Box 549<br>Petersburg, VA<br>23804 Phone: (804)732-3531  | 0      | 00/99 | 400<br>0      |

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| Reg | Park | Project Title                     | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|-----------------------------------|---|--------|-------|--------------|
| MAR | PETE | Safe Drinking Water Maintenance   | Barat, C.<br>Petersburg NB<br>P.O. Box 549<br>Petersburg, VA<br>23804 Phone: (804)732-3531                          | 0      | 00/99 | 1,800<br>0   |
| MAR | PETE | Stream Micro-biology testing      | Barat, C.<br>Petersburg NB<br>P.O. Box 549<br>Petersburg, VA<br>23804 Phone: (804)732-3531                          | 0      | 00/99 | 2,000<br>0   |
| MAR | PETE | Photo Point Study (Earthworks)    | Barat, C.<br>Petersburg NB<br>P.O. Box 549<br>Petersburg, VA<br>23804 Phone: (804)732-3531                          | 50     | 00/99 | 750<br>0     |
| MAR | PETE | Streambed Monitoring              | Gregory, Dr. J. D.<br>N.C. State University<br>Box 8002<br>Raleigh, NC<br>27695-8002 Phone: (919)737-2891           | 99     | 12/89 | 0<br>0       |
| MAR | PETE | Air Quality Biomonitoring Project | Lawrey, J. D.<br>George Mason University<br>4400 University Drive<br>Fairfax, VA<br>22030-4444 Phone: (703)323-2181 | 0      | 00/99 | 200<br>0     |

| Reg | Park | Project Title                             | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MAR | PETE | Gypsy Moth Trapping Program               | Leonard, D.<br>U.S. Forest Service<br>P.O. Box 2680<br>Asheville, NC<br>Phone: (704)257-4329  | 0      | 00/99 | 500<br>0      |
| MAR | PETE | Riverbank Stabilization at City Point.    | Melchor, J. N.<br>U.S. Corps of Engineers<br>Norfolk District<br>803 Front Street<br>Norfolk, VA<br>23510-1096 Phone: (804)441-3668                           | 0      | 06/90 | 3,000<br>0    |
| MAR | PETE | Flora Study                               | Porter, Dr. D. M.<br>VA Tech. & State University<br>Department of Biology<br>Blacksburg, VA<br>24061-0406 Phone: (703)231-6407                                | 0      | 10/90 | 350<br>0      |
| MAR | RICH | Assessment of Risk from Adjacent Landfill | Nimmo, Dr. D. W.<br>Colorado State University<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)491-0695 | 90     | 09/90 | 6,000<br>0    |
| MAR | SHEN | Parkwide Gypsy Moth Population Monitoring | Shenandoah National Park<br>Route 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243  | 50     | 12/99 | 0<br>45,000   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| MAR | SHEN | Natural Resource Monitoring (LTEMs)   | National Park Service<br>Shenandoah National Park<br>Rt. 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243   | 66     | 12/99 | 600,000<br>0 |
| MAR | SHEN | Annual Hard Mast Survey   | National Park Service<br>Shenandoah National Park<br>Rt. 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243   | 50     | 12/99 | 2,000<br>0   |
| MAR | SHEN | Virginia Breeding Bird Atlas  | National Park Service<br>Shenandoah National Park<br>Route 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243 | 90     | 12/90 | 0<br>0       |
| MAR | SHEN | Monitoring the Effects of Mowing and<br>Herbicide Stump Treatment on Vegetation in<br>Big Meadows | National Park Service<br>Shenandoah National Park<br>Route 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243 | 50     | 12/99 | 0<br>0       |
| MAR | SHEN | Ground Cover Regeneration of Closed<br>Campsites on Old Rag Mountain                              | National Park Service<br>Shenandoah National Park<br>Route 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243 | 100    | 10/88 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| MAR | SHEN | Gypsy Moth Induced Tree Mortality Monitoring   | National Park Service<br>Shenandoah National Park<br>Route 4, Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243 | 50     | 12/99 | 11,000<br>0  |
| MAR | SHEN | Impact of White-Tailed Deer on the<br>Vegetation of the Loft Mountain Developed<br>Area in Shenandoah National Park. | Shenandoah National Park<br>Rt. 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243                             | 85     | 12/89 | 250<br>0     |
| MAR | SHEN | Black Bear Population Monitoring by Sample<br>Indices.   | Shenandoah National Park<br>Rt. 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243                             | 0      | 00/99 | 1,000<br>0   |
| MAR | SHEN | Park Fisheries Monitoring Program  | Shenandoah National Park<br>Rt. 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243                             | 0      | 00/99 | 20,000<br>0  |
| MAR | SHEN | Big Meadows Swamp Water Level Monitoring   | Shenandoah National Park<br>Rt. 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243                             | 75     | 12/90 | 200<br>0     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | WPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| MAR | SHEN | Peregrine Falcon Recovery Project                     | Shenandoah National Park<br>Rt. 4 Box 348<br>Luray, VA<br>22835 Phone: (703)999-2243                                  | 30     | 10/92 | 12,000<br>4,000 |
| MAR | SHEN | National Atmospheric Deposition Program               | Shenandoah National Park<br>Rt. 4, Box 348<br>Luray, VA<br>22835-9051 Phone: (703)999-2243                            | 50     | 12/99 | 0<br>0          |
| MAR | SHEN | O3 and SO2 Monitoring                                 | Shenandoah National Park<br>Rt. 4, Box 348<br>Luray, VA<br>22835-9051 Phone: (703)999-2243                            | 50     | 12/99 | 71,000<br>0     |
| MAR | SHEN | Visibility and Air Quality Monitoring.                | Shenandoah National Park<br>Rt. 4, Box 348<br>Luray, VA<br>22835-9051 Phone: (703)999-2243                            | 50     | 12/99 | 2,500<br>0      |
| MAR | SHEN | Inventory of Vascular Plants of Big Meadows<br>- 1989 | Baxter, Ms. E.<br>James Madison University<br>Department of Biology<br>Harrisonburg, VA<br>22801 Phone: (703)568-6683 | 25     | 12/90 | 0<br>675        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MAR | SHEN | Fox and Raccoon Population Index Trends   | Coggin, Mr. J.<br>VA Dept. of Game & Inland Fisheries<br>Municipal Building<br>Buchanan, VA<br>24066 Phone:                              | 0      | 12/88 | 0<br>0        |
| MAR | SHEN | An Experimental Approach to the Taxonomy of Lycopodium selago L.  | Dawson, Mr. R. F.<br>40 Palmer Avenue<br>Winter Park, FL<br>32789 Phone: (407)740-8533   | 0      | 00/99 | 0<br>0        |
| MAR | SHEN | A Comparative Study Between Two Techniques of Estimating Habitat and Fish Populations in Southeast Headwater Streams.             | Dolloff, Dr. C. A.<br>VA Tech. & State University<br>Dept. of Fisheries and Wildlife Sci<br>Blacksburg, VA<br>24061 Phone: (703)231-4864 | 60     | 05/90 | 0<br>1,876    |
| MAR | SHEN | Use of New Assay Technology to Quantify Mortality from Virus in GYPCHK Plots in the Appalachian Integrated Pest Management Region | Elkinton, Mr. J. S.<br>University of Massachusetts<br>Department of Entomology<br>Amherst, MA<br>01003 Phone: (413)545-2283              | 90     | 04/90 | 0<br>25,000   |
| MAR | SHEN | Northern Flying Squirrel Investigations   | Fies, Mr. M. L.<br>VA Dept. of Game & Inland Fish.<br>1229 Cedars Court<br>Charlottesville, VA<br>22901 Phone: (804)296-4731             | 70     | 05/91 | 150<br>200    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| MAR | SHEN | Shenandoah Watershed Study (SWAS)  | Galloway, Dr. J. N.<br>University of Virginia<br>Dept. of Environmental Sciences<br>Charlottesville, VA<br>22903 Phone: (804)924-0569                               | 0      | 00/99 | 40,000<br>0     |
| MAR | SHEN | Epizootiology of Entomophaga sp. nr. aulicae, a fungal pathogen of the gypsy moth.                       | Hajek, Dr. A. E.<br>USDA Agricultural Research Service<br>Boyce Thompson Institute<br>Ithaca, NY<br>14853 Phone: ( ) -  | 100    | 12/89 | 0<br>0          |
| MAR | SHEN | Effects of a mid-July wildfire on Forest Vegetation and Soils in the Shenandoah National Park, Virginia. | Johnson, Dr. J. E.<br>VA Tech. & State University<br>Department of Forestry<br>228 Cheatham Hall<br>Blacksburg, VA<br>24061 Phone: (703)231-7679                    | 35     | 12/90 | 1,000<br>16,500 |
| MAR | SHEN | Inventory of Rare, Threatened, and Endangered Species  | Lipford, Dr. M. L.<br>VA Dept. of Conservation and Rec.<br>Natural Heritage Program<br>203 Governor Street, Suite 402<br>Richmond, VA<br>23219 Phone: (804)786-7951 | 15     | 03/92 | 1,000<br>0      |
| MAR | SHEN | A Review of Natural Resource Monitoring at Shenandoah National Park between 1978 and 1988                | McNulty-Huffman, Ms. C.<br>P.O. Box 3326<br>Gettysburg, PA<br>17325-0326 Phone: (717)624-8356   | 50     | 06/90 | 0<br>11,597     |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| MAR | SHEN | Investigation of Factors Affecting the Population of Brook Trout in the Hazel River, Shenandoah National Park  | Ney, Dr. J. J.<br>VA Tech. & State University<br>Dept. of Fisheries and Wildlife Sci<br>Blacksburg, VA<br>24061 Phone: (703)231-7292                          | 70     | 12/90 | 14,100<br>6,000 |
| MAR | SHEN | The Effects of Drifting Prey Density on Daily Rations of Brook Trout in the Southern Appalachians.   | Orth, Dr. D.<br>VA Tech. & State University<br>Dept. of Fisheries and Wildlife Sci<br>Blacksburg, VA<br>24061 Phone: (703)231-5320                            | 75     | 06/90 | 0<br>16,600     |
| MAR | SHEN | Field Evaluations of the Impact of <i>Bacillus thuringiensis</i> , Applied for Gypsy Moth Control on Non-Target Lepidoptera in the Shenandoah National Park. | Peacock, Dr. J. W.<br>USDA Forest Service<br>Northeastern Forest Expt. Station<br>Hamden, CT<br>96514 Phone: (203)773-2033                                    | 25     | 12/92 | 0<br>11,500     |
| MAR | SHEN | Evaluation of Single and Double Aerial Application of GYPCHK Against Gypsy Moth Populations in Shenandoah National Park.                                     | Podgwaite, Dr. J. D.<br>USDA Forest Service<br>Center for Biological Control<br>Northeastern Forest Expt. Station<br>Hamden, CT<br>06514 Phone: (203)773-2033 | 100    | 12/89 | 0<br>99,430     |
| MAR | SHEN | Parasites and Invertebrate Predators Associated with Gypsy Moth Life Stages in Shenandoah National Park.   | Reardon, Dr. R. C.<br>USDA Forest Service<br>180 Canfield Street<br>P.O. Box 4360<br>Morgantown, WV<br>26505 Phone: (304)291-4891                             | 30     | 00/99 | 0<br>0          |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| MAR | SHEN | Population Structure of Gypsy Moth in a Permanent Plot in Shenandoah National Park    | Roberts, Mr. E. A.<br>VA Tech. & State University<br>Dept. of Entomology<br>Blacksburg, VA<br>24061 Phone: (703)231-6826             | 80     | 03/90 | 0<br>15,000  |
| MAR | SHEN | Lichens as Monitors of Heavy Metals and Agents of Weathering                          | Schwartzman, Dr. D. W.<br>Howard University<br>Dept. of Geology and Geography<br>Washington, DC<br>20059 Phone: (202)636-6925        | 30     | 06/90 | 0<br>2,685   |
| MAR | SHEN | Mountain Cloud Chemistry/Forest Exposure Study Deposition in Shenandoah National Park | Sigmon, Mr. J. T.<br>University of Virginia<br>Dept. of Environmental Sciences<br>Charlottesville, VA<br>22903 Phone: (804)924-0557  | 80     | 12/90 | 0<br>190,000 |
| MAR | SHEN | Flora and Fauna of Northwestern Virginia  | Simpson, Mr. R.<br>Lord Fairfax Community College<br>Department of Natural Resources<br>Middletown, VA<br>22645 Phone: (703)869-1120 | 50     | 00/99 | 0<br>9,920   |
| MAR | SHEN | Gypsy Moth Defoliation Survey   | Tigner, Mr. T. G.<br>Virginia Dept. of Forestry<br>Box 3758<br>Charlottesville, VA<br>22903 Phone: (804)977-6555                     | 75     | 08/95 | 0<br>250     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| MAR | SHEN | Response of Black Bears to Gypsy Moth Infestation in Shenandoah National Park, Virginia  | Vaughan, Dr. M.<br>VA Tech. & State University<br>Wildlife Unit<br>Cheatham Hall<br>Blacksburg, VA<br>24061<br>Phone: (703)231-5046   | 80     | 06/91 | 35,000<br>14,000 |
| MAR | SHEN | To Develop a Long-Term Monitoring Program that Will Effectively Measure Changes in Selected Terrestrial and Aquatic Ecosystem Components                     | Vaughan, Mr. M. R.<br>U.S. Fish and Wildlife Service<br>VA Tech. & State University<br>Department of Forestry and Wildlife<br>Blacksburg, VA<br>22601<br>Phone: (703)969-5046 | 90     | 05/90 | 40,000<br>0      |
| MAR | STEA | Significant Ecological Features of the Steamtown National Historic Site and Rail Corridor to the Delaware Water Gap CA#4000-9-8009.                          | Smith, Mr. T. L.<br>The Nature Conservancy<br>34 Airport Drive<br>Middletown, PA<br>17057<br>Phone: (717)948-3962   | 85     | 12/89 | 27,056<br>0      |
| MAR | UPDE | Summer Limnological Survey, Upper Delaware S.R.R.  | Albert, Mr. R. C.<br>Delaware River Basin Commission<br>P.O. Box 7360<br>West Trenton, NJ<br>08628<br>Phone: (609)883-9500  | 100    | 12/89 | 15,000<br>0      |
| MAR | UPDE | Trout sampling in Upper Delaware tributaries for genetic comparison with the same species state wide. Flesh samples will be analysed for toxic accumulation. | Angyal, Mr. R. K.<br>N.Y. Dept. of Env'tl. Conservation<br>50 Wolf Rd.<br>Albany, NY<br>1233-0001<br>Phone: (518)457-6179   | 50     | 06/90 | 0<br>1,500       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MAR | UPDE | Habitat requirements of larval, sub-yearling, and spawning American Shad (Alosa sapidissima) | Backman, Mr. T. W.<br>U.S. Fish and Wildlife Service<br>Nat. Fisheries Research Center<br>Rural Delivery 4, Box 63<br>Wellsboro, PA<br>16901 Phone: (717)724-3322 | 10     | 12/92 | 200<br>1,000  |
| MAR | UPDE | Engineering Investigation at Inactive Hazardous Waste Site                                   | Demick, P.E., Mr. W. E.<br>N.Y. Dept. of Env'tl. Conservation<br>Bureau of Hazardous Waste Control<br>50 Wolf Road<br>Albany, NY<br>12233 Phone: (518)457-9538    | 100    | 09/89 | 500<br>59,101 |
| MAR | UPDE | Delaware River Population Estimate for American Shad and Juvenile American Shad Outmigration | Lupine, Mr. A. J.<br>State of New Jersey<br>Dept. of Env'tl. Conservation<br>B. of Sport Fisheries, P.O. Box 394<br>Lebanon, NJ<br>08833 Phone: (201)236-2118     | 40     | 00/99 | 0<br>4,000    |
| MAR | UPDE | Validity of Microtox testing: Cortese Landfill, UPDE   | Nimmo, Dr. D. W.<br>Colorado State University<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)491-0695     | 25     | 01/92 | 36,000<br>0   |
| MAR | UPDE | Reestablishing the American Bald Eagle in the Upper Delaware Basin                           | Nye, Mr. P.<br>N.Y. Dept. of Env'tl. Conservation<br>Endangered Species Unit<br>Wildlife Resources Center<br>Delmar, NY<br>12054-9767 Phone: (518)439-7635        | 0      | 00/99 | 500<br>50,000 |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$     |
|-----|------|---|---|--------|-------|-------------------|
| MAR | UPDE | Research and remediation, Cortese Landfill,<br>(Superfund site) | Reagan P.E., Mr. J.<br>N.Y. Dept. of Envtl. Conservation<br>Bureau of Eastern Remedial Action<br>Div. of Hazardous Waste, 50 Wolf Rd<br>Albany, NY<br>12233-7010 Phone: (518)457-5637 | 60     | 12/94 | 11,500<br>106,000 |
| MAR | UPDE | Cortese Landfill (toxic waste impact)                           | Ross Jr., Mr. M. A.<br>National Park Service UPDE<br>P.O. Box C<br>Narrowsburg, NY<br>12764 Phone: (717)729-7842  | 30     | 12/90 | 17,000<br>9,000   |
| MAR | UPDE | Set Up and Implement a Geographical<br>Information System       | Ross Jr., Mr. M. A.<br>National Park Service<br>P.O. Box C<br>Narrowsburg, NY<br>12764 Phone: (717)729-7842   | 1      | 00/99 | 1,500<br>0        |
| MAR | UPDE | Appropriate River Use, Managerial<br>Perspective                | Wellman, Mr. J.<br>VA Tech. & State University<br>School of Forestry<br>304 Cheatham Hall<br>Blacksburg, VA<br>24061-0324 Phone: (703)961-6663  | 100    | 09/89 | 200<br>2,000      |
| MAR | VAFO | Utility Corridor Data Management                                | Dwyer, K.<br>Valley Forge NHP<br>Valley Forge, PA<br>19481 Phone: (215)783-1011   | 10     | 09/91 | 0<br>700          |

| Reg | Park | Project Title                       | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|-------------------------------------|--|--------|-------|-----------------|
| MAR | VAFO | PCB's in the Valley Creek Watershed | Keating, S.<br>Groundwater Technology, Inc.<br>P.O. Box 309<br>Chadds Ford, PA<br>19317 Phone: (215)388-1466                 | 60     | 12/90 | 0<br>13,000     |
| MAR | VAFO | Dissolved Oxygen Monitoring Program | Kling, R. M.<br>EMC Environmental Services, Inc.<br>Fricks Lock Road, R. D. 1<br>Pottstown, PA<br>19464 Phone: (215)326-9662 | 50     | 06/91 | 0<br>5,000      |
| MAR | VAFO | Mapped Information System           | Lambert, B.<br>Valley Forge NHP<br>Valley Forge, PA<br>19481 Phone: (215)296-2583  | 10     | 00/99 | 1,600<br>1,440  |
| MAR | VAFO | Historic Trees Survey               | Lambert, B.<br>Valley Forge NHP<br>Valley Forge, PA<br>19481 Phone: (215)296-2583  | 0      | 00/99 | 1,800<br>0      |
| MAR | VAFO | Acid Precipitation Monitoring       | Lynch, Dr. J. A.<br>Penn State University<br>311 Forest Resources Lab<br>University Park, PA<br>16802 Phone: (814)863-8830   | 0      | 00/99 | 9,872<br>72,350 |
| MAR | VAFO | Annual Spotlight Deer Count         | Pumphrey, D.<br>Valley Forge NHP<br>P.O. Box 953<br>Valley Forge, PA<br>19481-0953 Phone: (215)783-1067                      | 0      | 00/99 | 200<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| MAR | VAFO | Gypsy Moth Monitoring   | Pumphrey, D.<br>Valley Forge NHP<br>Valley Forge, PA<br>19481 Phone: (215)673-1067   | 0      | 00/99 | 940<br>0        |
| MAR | VAFO | Integrated Pest Management Programs for Landscapes in National Parks of the Mid-Atlantic Region       | Raupp, M. J.<br>University of Maryland<br>Department of Entomology<br>College Park, MD<br>20742 Phone:   | 80     | 06/90 | 15,000<br>4,500 |
| MAR | VAFO | Streambank Stabilization Assessment   | Reed, W.<br>Valley Forge NHP<br>Valley Forge, PA<br>19481 Phone: (303)221-8319   | 10     | 12/90 | 3,600<br>0      |
| MAR | VAFO | Land Use Study of Valley Forge NHP  | Rhoads, Dr. A. F.<br>University of Pennsylvania<br>Morris Arboretum<br>9414 Meadowbrook Avenue<br>Philadelphia, PA<br>19118 Phone: (215)247-5777 | 100    | 12/89 | 7,790<br>0      |
| MAR | VAFO | Biological Survey and Management Plan for the Valley Creek Drainage Basin, Valley Forge National Park | Stauffer, Dr. J. R.<br>Pennsylvania State University<br>School of Forest Resources<br>University Park, PA<br>16802 Phone: (814)865-4511          | 95     | 12/89 | 1,008<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| MWR | AGFO | Paleontological Excavations at Beardog Hill, Agate Fossil Beds National Monument.                          | Hunt, Dr. R. M.<br>University of Nebraska<br>W436 Nebraska Hall<br>Division of Vert. Paleontology<br>Lincoln, NE<br>68588-0514 Phone: (402)472-4604     | 80     | 05/91 | 11,942<br>5,000 |
| MWR | AGFO | Assessment of the Aquatic Resources of Agate Fossil Beds National Monument.                                | Kondratieff, Mr. B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314                            | 70     | 09/90 | 1<br>0          |
| MWR | AGFO | Fishes of the Niobrara River at Agate Fossil Beds National Monument 1979 and 1989.                         | Stasiak, R. H.<br>University of Nebraska-Omaha<br>Department of Biology<br>College of Arts and Sciences<br>Omaha, NE<br>68182-0040 Phone: (402)554-2641 | 90     | 06/90 | 500<br>0        |
| MWR | APIS | Migrational and Local Movements of Wisconsin Common Loons.   | Anderson, Dr. R. K.<br>University of WI-Stevens Point<br>College of Natural Resources<br>Stevens Point, WI<br>54481 Phone: (715)346-3665                | 1      | 12/99 | 0<br>4,300      |
| MWR | APIS | Detering Double-Crested Cormorants from Commercial Fishing Nets Within Apostle Islands National Lakeshore. | Anderson, Dr. R. K.<br>University of WI-Stevens Point<br>College of Natural Resources<br>Stevens Point, WI<br>54481 Phone: (715)346-3665                | 25     | 08/91 | 0<br>4,000      |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MWR | APIS | Populations Dynamics, Habitat Use, and Behavior of Black Bears on Stockton Island, Apostle Islands National Lakeshore. | Anderson, Dr. R. K.<br>University of WI-Stevens Point<br>College of Natural Resources<br>Stevens Point, WI<br>54481 Phone: (715)346-3665                | 75     | 03/92 | 0<br>18,500   |
| MWR | APIS | Determine Abundance of Forage Fish.  | Balcer, M. D.<br>University of Wisconsin-Superior<br>CLSES-1800 Grand Avenue<br>Superior, WI<br>54880 Phone: (715)394-8424                              | 90     | 10/89 | 1<br>2,200    |
| MWR | APIS | Bald Eagle Blood Collection for Contaminant Analysis.  | Bowerman IV, W. W.<br>Michigan State University<br>Pesticide Research Center<br>East Lansing, MI<br>48824 Phone: (517)353-9430                          | 50     | 03/90 | 1<br>0        |
| MWR | APIS | Status of the Eastern Taiga Merlin in the Upper Midwest Region.  | Doolittle, T. C.<br>Cable Natural History Museum<br>Box 716<br>Cable, WI<br>54821 Phone: (715)373-2703  | 75     | 12/91 | 0<br>5,500    |
| MWR | APIS | Geomorphic Processes on Long Island.   | Green III, Dr. T.<br>University of Wisconsin<br>Department of Civil and Env. Eng.<br>Department of Geology<br>Madison, WI<br>53706 Phone: (608)262-0038 | 50     | 09/90 | 20,000<br>0   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| MWR | APIS | Genetic variation of taxonomic traits of the northern red oak complex on the Apostle Islands. | Isebrands, J. G.<br>USDA-Forest Service<br>North Central Forest Exp. Station<br>P.O. Box 898<br>Rhineland, WI<br>54501 Phone: (715)362-7474                        | 25     | 09/91 | 0<br>10,000     |
| MWR | APIS | Sea-Kayak Use in the Apostle Islands.   | Lime, Dr. D. W.<br>University of Minnesota<br>Forest Resources Department<br>110 Green Hall<br>St. Paul, MN<br>55108 Phone: (612)624-2250                          | 27     | 07/90 | 10,000<br>8,860 |
| MWR | APIS | Toxicity in Colonial Waterbird Eggs and the Relationship to Deformities in Hatchlings.        | Ludwig, J. P.<br>The Academy Center<br>512 N. Lincoln<br>Bay City, MI<br>48708 Phone: (517)892-8681  | 1      | 12/99 | 1<br>0          |
| MWR | APIS | Island Biodiversity of the Flora of the Apostle Islands.                                      | Middleton, Dr. A.<br>Iowa State University<br>Botany Department<br>Bessey Hall, ISU<br>Ames, IA<br>50011 Phone: (515)294-0132                                      | 10     | 01/90 | 100<br>200      |
| MWR | APIS | Literature Search.  | Mladenoff, D. J.<br>University of Minnesota, Duluth<br>Natural Resources Research Instit.<br>5013 Miller Trunk Highway<br>Duluth, MN<br>55811 Phone: (218)720-4279 | 35     | 06/90 | 4,500<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | APIS | Evaluation of Piping Plover Habitat in the Great Lakes National Lakeshores.   | Nordstrom, L. H.<br>University of MO-Columbia<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3436  | 85     | 04/90 | 3,140<br>0    |
| MWR | APIS | Beaver Ecology in the Apostle Islands.  | Peterson, Dr. R. O.<br>Michigan Technological University<br>Forestry Department<br>Houghton, MI<br>49931 Phone: (906)487-2179                           | 60     | 10/90 | 15,000<br>0   |
| MWR | APIS | The Reconstruction of the Original Forest Composition on the Apostle Islands from Pollen Analysis and Identification of Stump Wood. | Swain, A. M.<br>University of Wisconsin-Madison<br>Center for Climatic Research<br>1225 West Dayton Street<br>Madison, WI<br>53706 Phone: (608)845-9270 | 85     | 06/89 | 5,000<br>0    |
| MWR | APIS | The Feasibility of Collecting Zooplankton Using an Experimental Method.   | Whiteside, M. C.<br>University of Minnesota<br>Department of Biology<br>221 Life Science Building<br>Duluth, MN<br>55812 Phone: (218)726-7264           | 1      | 12/99 | 1<br>0        |
| MWR | CUVA | Cuyahoga River Fish Tissue Investigation  | Tuckerman, Mr. S.<br>Ohio E.P.A.<br>2110 East Aurora Road<br>Twinsburg, OH<br>44087 Phone: (216)425-9171  | 33     | 11/91 | 300<br>32,000 |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MWR | EFMO | Historic Orchard Survey  | Coli, Dr. W. M.<br>University of Massachusetts<br>Fernald Hall<br>Amherst, MA<br>01003 Phone: (313)545-2283               | 100    | 10/89 | 1,200<br>0    |
| MWR | FOLS | Prairie Restoration Monitoring Program   | Ernsting, Mr. G.<br>National Park Service<br>Fort Larned NHS<br>Route 3<br>Larned, KS<br>67550 Phone: (316)285-6911       | 100    | 12/89 | 2,000<br>0    |
| MWR | GWCA | Germination/Viability Rates of SORGHASTRUM<br>NUTANS and FESTUCA ELATIER (also<br>identification of: PETALOSTEMON PURPUREUM,<br>PETALOSTEMON CANDIDUM, AMORPHA CANESCENS<br>and ECHINACEA PURPUREA). | Arbogast, R. L.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376 | 100    | 05/89 | 0<br>1        |
| MWR | GWCA | Environmental Impact Statement for the<br>Proposed Draining of Williams Pond at George<br>Washington Carver National Monument.   | Deitz, R.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)782-5111       | 100    | 05/89 | 0<br>1        |
| MWR | GWCA | The Effects of Burning on Microarthropods<br>and Soil Fertility.   | Donham, R.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376      | 100    | 05/89 | 0<br>1        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| MWR | GWCA | Water Quality Work Plan for George Washington Carver National Monument.  | Kondratieff, B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314 | 30     | 12/90 | 1<br>0       |
| MWR | GWCA | Small Mammal Survey at George Washington Carver National Monument.   | LaFerla, M.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376    | 100    | 05/89 | 0<br>1       |
| MWR | GWCA | A Floristic Survey of the Woody Vegetation of George Washington Carver National Monument in Newton County, Missouri. | Marston, T. G.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376 | 100    | 05/89 | 0<br>1       |
| MWR | GWCA | Evidence of Dogs and Deer at George Washington Carver National Monument.   | Metts, S.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376      | 100    | 05/89 | 0<br>1       |
| MWR | GWCA | Human Impact on Red-Tailed Hawk Behavior at George Washington Carver National Monument.                              | Reed, R. M.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376    | 100    | 05/89 | 0<br>1       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MWR | GWCA | Heavy Metal Study at George Washington Carver National Monument.   | Smith, S. L.<br>Missouri Southern State College<br>Newman & Duquesne Roads<br>Joplin, MO<br>64801 Phone: (417)625-9376   | 100    | 05/89 | 0<br>1        |
| MWR | HEHO | Prairie Inventory: Herbert Hoover National Historic Site 1989.     | Christiansen, Dr. P. A.<br>Cornell College<br>Mt. Vernon, IA<br>52314 Phone: (319)895-4214                               | 100    | 02/90 | 950<br>0      |
| MWR | HEHO | Water Quality Work Plan for Herbert Hoover National Historic Site. | Kondratieff, B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314 | 30     | 12/90 | 1<br>0        |
| MWR | HOME | Water Quality Work Plan for Homestead National Monument.           | Kondratieff, B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314 | 30     | 12/90 | 165<br>0      |
| MWR | HSTR | Oral History   | Dunar, Dr. A. J.<br>University of Alabama<br>13027 Branscomb Road<br>Huntsville, AL<br>35803 Phone: (205)895-6310        | 100    | 09/89 | 0<br>2,500    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$    |
|-----|------|---|--|--------|-------|------------------|
| MWR | ILMI | A Profile of Commercial/Industrial Activity and Associated Impacts on Enjoyable Recreational Use of the Upper Illinois Waterway | Burdge, Dr. R. J.<br>University of Illinois<br>Institute for Environmental Studies<br>408 S. Goodwin Ave.<br>Urbana, IL<br>61801<br>Phone: (217)333-2916 | 100    | 07/89 | 17,500<br>31,611 |
| MWR | INDU | Acid Precipitation Monitoring at Indiana Dunes National Lakeshore.  | Brenan, L. S.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304<br>Phone: (219)926-7561                          | 50     | 12/99 | 6,000<br>0       |
| MWR | INDU | Bacterial Contaminant Monitors of the Waters of Indiana Dunes National Lakeshore.   | Brenan, L. S.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304<br>Phone: (219)926-7561                          | 50     | 12/99 | 6,000<br>0       |
| MWR | INDU | Sulfur Dioxide Levels at Indiana Dunes National Lakeshore.  | Brenan, L. S.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304<br>Phone: (219)926-7561                          | 50     | 12/99 | 1<br>0           |
| MWR | INDU | Ozone Monitoring at Indiana Dunes National Lakeshore.   | Brenan, L. S.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304<br>Phone: (219)926-7561                          | 50     | 12/99 | 10,000<br>0      |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MWR | INDU | Patterns and Levels of Genetic Variation.  | Brooks, R. E.<br>University of Kansas<br>Kansas Biological Survey<br>Lawrence, KS<br>66045 Phone: (913)864-4493                                  | 100    | 12/89 | 1<br>0        |
| MWR | INDU | Shallow Ground-Water Flow and Stream-Aquifer Relations in the Great Marsh Wetland, Indiana Dunes National Lakeshore. | Cohen, D. A.<br>U.S. Geological Survey<br>Water Resources Division<br>5957 Lakeside Blvd.<br>Indianapolis, IN<br>46278-1996 Phone: (317)290-3330 | 75     | 12/99 | 1<br>0        |
| MWR | INDU | Monitoring the Water Resources of Indiana Dunes National Lakeshore.  | Cohen, D. A.<br>U.S. Geological Survey<br>Water Resources Division<br>5957 Lakeside Blvd.<br>Indianapolis, IN<br>46278-1996 Phone: (317)290-3330 | 50     | 12/99 | 1<br>0        |
| MWR | INDU | Hydrogeology of Indiana Dunes National Lakeshore.  | Cohen, D. A.<br>U.S. Geological Survey<br>Water Resources Division<br>5957 Lakeside Blvd.<br>Indianapolis, IN<br>46278-1996 Phone: (317)290-3330 | 99     | 12/90 | 1<br>0        |
| MWR | INDU | Effects of Prescribed Burning on Prairie and Oak Woodland Communities of Indiana Dunes National Lakeshore.           | Cole, K. L.<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561                    | 70     | 12/96 | 20,000<br>0   |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | INDU | Paleoecology and Pre-Settlement Vegetation of Indiana Dunes National Lakeshore. | Cole, K. L.<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 80     | 12/91 | 10,000<br>0   |
| MWR | INDU | History of Heavy Metal Accumulation in Cowles Bog, Indiana.                     | Cole, K. L.<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 100    | 12/90 | 5,000<br>0    |
| MWR | INDU | Taxonomic and Ecological Study of Phlox bifida Complex.                         | Cypher, E.<br>Southern Illinois University<br>Dept. of Botany RR #2<br>Box 302<br>Makanda, IL<br>62958 Phone: (618)453-2496   | 75     | 07/90 | 1<br>0        |
| MWR | INDU | Fire Weather Monitoring.  | Douhan, C.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561     | 50     | 12/99 | 4,500<br>0    |
| MWR | INDU | European Alder Eradication Program.   | Douhan, C.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561     | 50     | 12/99 | 2,400<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | INDU | Gypsy Moth Monitoring.  | Douhan, C.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561                                   | 1      | 12/99 | 1,500<br>0    |
| MWR | INDU | Incidence of Lyme disease at Indiana Dunes National Lakeshore.          | Fagre, Dr. D. B.<br>National Park Service<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 1      | 10/99 | 3,500<br>0    |
| MWR | INDU | Mammal Distribution and Abundance in Habitat Mosaics.                   | Fagre, Dr. D. B.<br>National Park Service<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 1      | 10/96 | 5,000<br>0    |
| MWR | INDU | Roadkill Survey.  | Harris, R. L.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561                                | 0      | 12/99 | 400<br>0      |
| MWR | INDU | Geographic Information System - Baseline Digital Database Construction. | Harris, R.<br>National Park Service<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Road<br>Porter, IN<br>46304 Phone: (219)926-7561         | 80     | 07/90 | 30,000<br>0   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MWR | INDU | Verify Occurrence of Karner Blue Butterfly.  | Martin, M.<br>Indiana Div. of Nature Preserves<br>Dept. of Natural Resources<br>Room 605B, State Office Bldg.<br>Indianapolis, IN<br>46204 Phone: (317)232-4052 | 1      | 06/92 | 1<br>0        |
| MWR | INDU | Inventory and Monitoring of Sand Thistle<br>(Cirsium pitcheri) in the Great Lakes<br>National Parks. | McEachern, A. K.<br>National Park Service<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Road<br>Porter, IN<br>46304 Phone: (219)926-7561    | 50     | 09/93 | 1<br>0        |
| MWR | INDU | Fuel Loading Studies.  | O'Brien, D.<br>National Park Service Lakeshore<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Spring Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 50     | 12/99 | 1<br>0        |
| MWR | INDU | Natural Succession on Former Homesites at<br>Indiana Dunes National Lakeshore.                       | Parry, B.<br>University of Wisconsin-Madison<br>Birge Hall<br>Dept. of Botany<br>Madison, WI<br>53706 Phone: (608)262-2593                                      | 50     | 06/90 | 1<br>0        |
| MWR | INDU | Herbarium.   | Pavlovic, M. B.<br>National Park Service<br>Indiana Dunes National Lakeshore<br>1100 North Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561      | 50     | 12/99 | 1<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| MWR | INDU | Minimum Viable Populations of Fame Flower<br>( <i>Talinum rugospermum</i> ) | Pavlovic, M. B.<br>Indiana Dunes National Lakeshore<br>National Park Service<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 40     | 06/93 | 3,500<br>0   |
| MWR | INDU | Plant Research at Miller Woods Near Douglas<br>EE Center.                   | Peloquin, R. L.<br>Purdue University<br>Calumet Campus<br>Hammond, IN<br>46323 Phone: (219)844-0520   | 50     | 12/92 | 1<br>0       |
| MWR | INDU | Structuring of Pond Communities by<br>Predation.                            | Poulson, T. L.<br>University of Illinois<br>540 South Ninth St.<br>LaGrange, IL<br>60525-3002 Phone: (708)352-3460                                      | 50     | 12/94 | 1<br>0       |
| MWR | INDU | Distribution and Ecology of Amphibians and<br>Reptiles.                     | Resetar, A.<br>482 Park Avenue<br>Valparaiso, IN<br>46304 Phone: (219)465-7231  | 65     | 09/90 | 1<br>0       |
| MWR | INDU | Investigation of Genetic Variation and its<br>Expression.                   | Scheiner, S.<br>Northern Illinois University<br>Dept. of Biol. Sciences<br>DeKalb, IL<br>60115-2861 Phone: (815)753-7847                                | 10     | 06/94 | 0<br>3,500   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$  |
|-----|------|--|---|--------|-------|----------------|
| MWR | INDU | Lake Level Variation in Lake Michigan:<br>Magnitude and Timing of Past and Future<br>Fluctuations. | Thompson, T. A.<br>Indiana Geological Survey<br>611 North Walnut Grove<br>Bloomington, IN<br>47405 Phone: (812)335-2687                     | 85     | 06/91 | 0<br>38,000    |
| MWR | INDU | Vertebrates of Lupine Lane Prairie.  | Werth, R. J.<br>Purdue University - Calumet<br>Dept. of Biology<br>Hammond, IN<br>46323 Phone: (219)989-2416                                | 100    | 12/88 | 1,000<br>2,500 |
| MWR | INDU | Mammal Survey.   | Whitaker, Jr., J. O.<br>Indiana State University<br>Terre Haute, IN<br>47809 Phone: (812)237-2383   | 95     | 12/90 | 1<br>0         |
| MWR | INDU | Base-line Data on Interstitial Sand<br>Invertebrates.  | Whitman, R. L.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Road<br>Porter, IN<br>46304 Phone: (219)926-7561              | 100    | 12/89 | 1<br>0         |
| MWR | INDU | Grasshopper Research.  | Willey, Dr. R. B.<br>University of Illinois<br>Dept. of Biol. Sciences M/C 066<br>P.O Box 4348<br>Chicago, IL<br>60680 Phone: (312)996-8674 | 50     | 12/99 | 1<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MWR | INDU | Aquatic Biology of Interdunal Ponds  | Willey, R. L.<br>University of Chicago at Chicago<br>Dept. of Biological Sciences<br>Box 4348<br>Chicago, IL<br>60680<br>Phone: (312)702-7963                 | 33     | 06/99 | 1<br>0        |
| MWR | ISRO | Forest Ecology and Moose/Plant Interactions  | Allison, Dr. T. D.<br>Ohio State University<br>1465 Mt. Vernon Ave.<br>Marion, OH<br>43302<br>Phone: (614)389-2361  | 100    | 09/89 | 0<br>1        |
| MWR | ISRO | Determining Contaminant Levels of Nestling Eagles near Michigan's Great Lakes  | Bowerman, Mr. W. W.<br>U.S. Fish & Wildlife Service<br>1405 S. Harrison Rd. #302<br>East Lansing, MI<br>48823<br>Phone: (517)337-6650                         | 50     | 04/90 | 0<br>34,850   |
| MWR | ISRO | Invertebrate Survey By College Honor Students  | Bradley, Dr. R. A.<br>Ohio State University, Marion Cmps.<br>Zoology Department<br>1465 Mt. Vernon Avenue<br>Marion, OH<br>43302-5695<br>Phone: (614)389-6786 | 100    | 09/89 | 0<br>625      |
| MWR | ISRO | Inventory and Conservation of Genetic Resources in the Form of Historically Significant Fruit Trees in the National Park System. | Coli, Dr. W. M.<br>University of Massachusetts<br>Dept. of Entomology<br>Fernald Hall<br>Amherst, MA<br>01003<br>Phone: (413)545-2283                         | 50     | 06/91 | 1<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| MWR | ISRO | The Occurrence of Windthrow and Its Consequences in a Southern Boreal Forest.      | Dlutkowski, Ms. S.<br>Michigan Technological University<br>Dept. of Biological Sciences<br>Houghton, MI<br>49931 Phone: (906)487-2478                           | 30     | 01/92 | 20,000<br>0  |
| MWR | ISRO | Net Economic Value of Recreation in Isle Royale National Park                      | Donnelly, Dr. D. M.<br>USFS Rocky Mtn Experiment Station<br>3825 Mulberry St.<br>Fort Collins, CO<br>80524 Phone: (303)498-1887                                 | 1      | 01/92 | 0<br>1       |
| MWR | ISRO | Status of the Eastern Taiga Merlin (Falco columbarius) in the Upper Midwest Region | Doolittle, Mr. T. C.<br>Cable Natural History Museum<br>Box 416<br>Cable, WI<br>54821 Phone: (715)798-3890  | 60     | 01/92 | 0<br>2,000   |
| MWR | ISRO | Bryophyte Species And Communities Of Isle Royale                                   | Glime, Dr. J. M.<br>Michigan Technological University<br>Dept. of Biological Sciences<br>Houghton, MI<br>49931 Phone: (906)487-2546                             | 50     | 01/95 | 0<br>1       |
| MWR | ISRO | Fish Contaminant Monitoring Program  | Jamsen, Mr. R. T.<br>Michigan Dept. of Natural Resources<br>Marquette Fisheries Station<br>484 Cherry Creek Road<br>Marquette, MI<br>49855 Phone: (906)249-1611 | 50     | 12/99 | 0<br>1       |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|---|--|--------|-------|----------------|
| MWR | ISRO | Additions to The Flora of Isle Royale National Park                           | Janke, Dr. R. A.<br>Michigan Technological University<br>Dept. of Biological Sciences<br>Houghton, MI<br>49931 Phone: (906)487-2034                                | 1      | 12/99 | 0<br>1         |
| MWR | ISRO | Long-term Interactions Between Moose and Forest Vegetation                    | Jordan, Dr. P. A.<br>University of Minnesota<br>Dept. of Fisheries and Wildlife<br>1980 Folwell Avenue / Hodson Hall<br>St. Paul, MN<br>55108 Phone: (612)624-9281 | 70     | 12/95 | 0<br>1,800     |
| MWR | ISRO | Permanent Plots Inventory and Monitoring                                      | Krumenaker, Mr. R. J.<br>National Park Service<br>Isle Royale National Park<br>87 N. Ripley St.<br>Houghton, MI<br>49931 Phone: (906)482-0986                      | 50     | 09/90 | 30,000<br>0    |
| MWR | ISRO | Development of a Geographic Information System for Isle Royale National Park. | Maclean, Dr. A. L.<br>Michigan Technological University<br>School of Forestry & Wood Products<br>Houghton, MI<br>49931 Phone: (906)487-2030                        | 95     | 01/90 | 20,000<br>0    |
| MWR | ISRO | Northern Blue Butterfly Research  | Mueller, Mr. S. J.<br>Ody Brook Enterprises<br>13010 Northland Drive<br>Cedar Springs, MI<br>49319 Phone: (616)696-1753  | 100    | 09/89 | 0<br>1         |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|--|--|--------|-------|------------------|
| MWR | ISRO | The Effects of Large Mammal Browsing on the Dynamics of Northern Ecosystems.   | Pastor, Dr. J.<br>University of Minnesota /Duluth<br>Natural Resources Research Inst.<br>3151 Miller Trunk Highway<br>Duluth, MN<br>55811 Phone: (218)720-4271 | 15     | 01/93 | 0<br>1           |
| MWR | ISRO | Wolf and Moose Ecology and Interactions on Isle Royale National Park.  | Peterson, Dr. R. O.<br>Michigan Technological University<br>School of Forestry & Wood Products<br>Houghton, MI<br>49931 Phone: (906)487-2179                   | 1      | 12/99 | 64,800<br>14,000 |
| MWR | ISRO | Colonial Nesting Bird Census - U.S. Great Lakes  | Scharf, Dr. W. C.<br>Northwestern Michigan College<br>101 Science Bldg., N.M.C.<br>1701 E. Front Street<br>Traverse City, MI<br>49684 Phone: (616)922-1275     | 100    | 09/89 | 0<br>61,000      |
| MWR | ISRO | Small-Mesh Gill Net Assessment of Juvenile and Adult Fish Stocks in Near Shore Waters of Lake Superior, Isle Royale National Park. | Selgeby, Dr. J.<br>U.S. Fish & Wildlife Service<br>Ashland Biological Station<br>2800 East Front Street<br>Ashland, WI<br>54806 Phone: (715)682-6163           | 100    | 08/89 | 0<br>12,000      |
| MWR | ISRO | Continuing Beaver Studies At Isle Royale.  | Shelton, Dr. P. C.<br>Clinch Valley College<br>Wise, VA<br>24293 Phone: (703)328-0202  | 75     | 06/90 | 2,200<br>0       |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MWR | ISRO | Produce Soil Map of Isle Royale National Park  | Shetron, Dr. S. G.<br>Michigan Technological University<br>School of Forestry & Wood Products<br>Houghton, MI<br>49931 Phone: (906)487-2321                                    | 60     | 06/90 | 30,000<br>0   |
| MWR | ISRO | Density Dependence and Population Dynamics in the Chorus Frog  | Smith, Dr. D. C.<br>Williams College<br>Biology Department<br>Williamstown, MA<br>01267 Phone: (413)597-3081   | 100    | 09/89 | 0<br>141,000  |
| MWR | ISRO | Role of Modeling in the Inventory and Monitoring of National Parks: Isle Royale National Park as a Case Study                      | Stottlemeyer, Dr. J. R.<br>NPS-Coop. Park Studies Unit<br>Michigan Technological University<br>Department of Biological Sciences<br>Houghton, MI<br>49931 Phone: (906)487-2478 | 25     | 12/90 | 28,000<br>0   |
| MWR | ISRO | Effects of Atmospheric Acid Deposition on Watershed/Lake Ecosystems of Isle Royale, Pictured Rocks, and Michigan's Upper Peninsula | Stottlemeyer, Dr. J. R.<br>NPS-Coop. Park Studies Unit<br>Michigan Technological University<br>Department of Biological Sciences<br>Houghton, MI<br>49931 Phone: (906)487-2478 | 90     | 01/91 | 0<br>97,000   |
| MWR | ISRO | Population Biology of the Dragonfly AESHNA JUNCEA  | Van Buskirk, Mr. J.<br>Duke University<br>Department of Zoology<br>Durham, NC<br>27706 Phone: (919)684-5257  | 75     | 10/90 | 0<br>9,500    |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|--|--|--------|-------|-----------------|
| MWR | ISRO | Assesment of Conditions for Conducting Aquatic Research at Isle Royale National Park | Vrana, Mr. K.<br>Michigan State University<br>Sea Grant/Bottomland Preserve Pgm.<br>Natural Resources Building<br>East Lansing, MI<br>48824 Phone: (517)353-9568 | 50     | 01/90 | 0<br>1          |
| MWR | LIBO | Gypsy Moth Early Detection Program   | Adams, D. F.<br>National Park Service<br>Lincoln Boyhood National Memorial<br>Lincoln City, IN<br>47552 Phone: (812)937-4541                                     | 1      | 12/99 | 1<br>0          |
| MWR | LIBO | Forest Restoration at Lincoln Boyhood  | Adams, D. F.<br>National Park Service<br>Lincoln Boyhood National Memorial<br>Lincoln City, IN<br>47552 Phone: (812)937-4541                                     | 100    | 12/89 | 1<br>0          |
| MWR | MOCI | Palynological Studies in the Vicinity of Mound City Group.                           | Snyder, G. G.<br>Schoolcraft College<br>18600 Haggerty Rd.<br>Livonia, MI<br>48152 Phone: (313)455-5342  | 80     | 07/90 | 8,825<br>0      |
| MWR | MWRO | An Assessment of Exotic Plants Within Great Plains Parks of the Midwest Region.      | Stubbendieck, J. L.<br>University of Nebraska-Lincoln<br>Department of Agronomy<br>349 Keim Hall<br>Lincoln, NE<br>68583 Phone: (402)472-1519                    | 33     | 06/91 | 30,000<br>1,500 |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$ |
|-----|------|--|---|--------|-------|----------------|
| MWR | OZAR | Delineation of Recharge Areas for Four Important Cave Streams, Ozark NSR.                                | Aley, Mr. T.<br>Ozark Underground Laboratory<br>Protem, MO<br>65733 Phone: (417)785-4289  | 100    | 04/89 | 6,000<br>0     |
| MWR | OZAR | Sole Source Aquifer Petition for Big Spring Recharge Area.   | Aley, Mr. T.<br>Ozark Underground Laboratory<br>Protem, MO<br>65733 Phone: (417)785-4289  | 100    | 12/89 | 3,000<br>0     |
| MWR | OZAR | Application of the Index of Biotic Integrity to Resource Inventory in the Current River Basin, Missouri. | Boyle, T. P.<br>Colorado State University<br>335 Aylesworth Hall NW<br>Fort Collins, CO<br>80523 Phone: (303)491-1452               | 98     | 03/90 | 13,000<br>0    |
| MWR | OZAR | Designing a Land Recreation Monitoring System for Ozark National Scenic Riverways.                       | Chilman, Mr. K. C.<br>Southern Illinois University<br>Dept. of Forestry<br>Carbondale, IL<br>62901 Phone: (618)453-3341             | 25     | 09/93 | 6,000<br>0     |
| MWR | OZAR | Water-Quality Monitoring, Ozark National Scenic Riverways.   | Davis, J. V.<br>USGS, Water Resources Division<br>1400 Independence Rd.<br>Mail Stop 200<br>Rolla, MO<br>65401 Phone: (314)341-0839 | 100    | 12/89 | 4,800<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| MWR | OZAR | Mammals of the Ozark National Scenic Riverways.  | Fritzell, Dr. E. K.<br>University of Missouri<br>School of Natural Resources<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3436 | 75     | 08/90 | 4,941<br>21,200 |
| MWR | OZAR | Mammals of ONSR - Distribution and Identity of WID Gastrointestinal Parasites in Missouri. | Fritzell, Dr. E. K.<br>University of Missouri<br>School of Natural Resources<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3436 | 1      | 12/99 | 1<br>0          |
| MWR | OZAR | Glades of the Ozark National Scenic Riverways.   | Glenn-Lewin, Dr. D. C.<br>Iowa State University<br>Department of Botany<br>Ames, IA<br>50011 Phone: (515)294-3523                               | 70     | 02/91 | 34,515<br>0     |
| MWR | OZAR | Restoration of Ruffed Grouse in the Ozark Highlands.                                       | Kurzejeski, Mr. E. W.<br>Missouri Department Conservation<br>1110 S. College Ave.<br>Columbia, MO<br>65201 Phone: (314)882-9880                 | 50     | 05/99 | 0<br>60,000     |
| MWR | OZAR | Current River Giggling Study.  | Legler, R. E.<br>Missouri Department of Conservation<br>P.O. Box 138<br>West Plains, MO<br>65775 Phone: (417)256-7161                           | 100    | 02/89 | 0<br>500        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| MWR | OZAR | The Stoneflies (Plecoptera) of the Ozark & Ouachita Mountains.                                       | Poulton, Dr. B. C.<br>Nat. Fish Containin. Res. Center<br>U.S. Fish & Wildlife Service<br>4200 New Haven Rd.<br>Columbia, MO<br>65201 Phone: (314)875-5399 | 100    | 08/89 | 0<br>3,000     |
| MWR | OZAR | Secondary Production in an Ozark Stream.   | Rabeni, Mr. C.<br>University of Missouri<br>USFWS MO Coop F&W Research Unit<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3524             | 97     | 06/90 | 1<br>0         |
| MWR | OZAR | Movement and Habitat Use of the Northern Hog Sucker in the Current River, Missouri.                  | Rabeni, C. F.<br>University of Missouri<br>USFWS MO Coop F&W Research Unit<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3524              | 70     | 08/90 | 3,600<br>7,000 |
| MWR | PEVI | "The Smasher" - The Carronade and its Influence on American Naval Tactics at the Battle of Lake Erie | Altoff, G. T.<br>NPS, Perry's Victory & IPM<br>P.O. Box 549<br>93 Delaware Avenue<br>Put-in-Bay, OH<br>43456 Phone: (419)285-2184                          | 100    | 10/89 | 1,600<br>2,600 |
| MWR | PIPE | Prairie Restoration  | Boudreau, D. L.<br>National Park Service<br>Pipestone National Monument<br>P.O. Box 727<br>Pipestone, MN<br>56164 Phone: (507)825-5464                     | 1      | 12/99 | 25,000<br>0    |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| MWR | PIPE | Prescribed Burn 1989   | Boudreau, D. L.<br>National Park Service<br>Pipestone National Monument<br>P.O. Box 727<br>Pipestone, MN<br>56164 Phone: (507)825-5464              | 1      | 12/99 | 770<br>0     |
| MWR | PIPE | Fire Weather Station Monitoring  | Boudreau, D. L.<br>National Park Service<br>Pipestone National Monument<br>P.O. Box 727<br>Pipestone, MN<br>56164 Phone: (507)825-5464              | 1      | 12/99 | 1<br>0       |
| MWR | PIPE | Water Quality Work Plan for Pipestone National Monument  | Kondratieff, B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314                            | 30     | 12/90 | 5,000<br>0   |
| MWR | PIPE | Fishes of Pipestone National Monument  | Schmidt, K.<br>North American Native Fishes Assn.<br>1508 Fairmount Ave.<br>St. Paul, MN<br>55105 Phone: (612)699-6832                              | 100    | 12/89 | 1<br>0       |
| MWR | PIPE | Plant Exploration in the Midwestern States of the U.S.A. to Collect Big Bluestem, Switchgrass, and Indiangrass Germplasm for Forage Plant Improvement. | Vogel, K. P.<br>U.S. Department of Agriculture<br>332 Keim Hall, East Campus<br>University of Nebraska<br>Lincoln, NE<br>68583 Phone: (402)472-1564 | 1      | 12/99 | 0<br>5,000   |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| MWR | PIRO | Status of Furbearers and Moose within Pictured Rocks National Lakeshore, MI.  | Dauess, Mr. T. V.<br>University of Wisconsin-Stevens Pt.<br>College of Natural Resources<br>Stevens Point, WI<br>54481 Phone: (715)346-2178                         | 55     | 12/90 | 11,500<br>0  |
| MWR | PIRO | Vegetation Response to Disturbance within Pictured Rocks National Lakeshore.  | Loope, Dr. W. L.<br>National Park Service<br>P.O. Box 40<br>Sand Point Road<br>Munising, MI<br>49862 Phone: (906)387-2607   | 90     | 12/90 | 1<br>0       |
| MWR | PIRO | Population Biology and Landscape Ecology of Dune Thistle ( <i>Cirsium pitcheri</i> ) in Great Lakes National Lakeshores.                  | McEachern, I. A. K.<br>Great Lakes Coop. Park Studies Unit<br>1040 WARF Building<br>610 Walnut St.<br>Madison, WI<br>53705 Phone: (608)262-2779                     | 50     | 10/91 | 8,000<br>0   |
| MWR | PIRO | Monitoring Program Implementation for Several Rare Botrychium (grapefern) Species within the Pictured Rocks National Lakeshore, Michigan. | Schultz, Ms. J. L.<br>Northern Michigan University<br>Dept. of Biology<br>Marquette, MI<br>49855 Phone: (906)345-9885   | 90     | 12/89 | 2,000<br>0   |
| MWR | PIRO | Effects of Atmospheric Acid Deposition on Watershed/Lake Ecosystems of Isle Royale, Pictured Rocks and Michigan's Upper Peninsula.        | Stottlemeyer, Dr. J. R.<br>National Park Service<br>Dept. of Biological Sciences<br>Michigan Technological University<br>Houghton, MI<br>49931 Phone: (906)487-2478 | 90     | 11/90 | 0<br>37,000  |



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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MWR | SACN | Aquatic resource inventory and monitoring of the SACN           | Boyle, Dr. T. P.<br>Colorado State University<br>NPS-Water Resources Division<br>332 Aylesworth Hall NW<br>Fort Collins, CO<br>80523 Phone: (303)491-1452            | 90     | 09/90 | 25,000<br>0   |
| MWR | SACN | Freshwater Mussel Monitoring on the St. Croix River, 1989.      | Heath, D. J.<br>Wisconsin DNR<br>Bureau of Endangered Resources<br>Box 7921<br>Madison, WI<br>53707 Phone: (608)266-024  | 1      | 12/99 | 1<br>1        |
| MWR | SACN | Assessment of point and non-point sources on SACR               | Nimmo, Dr. D. W.<br>Colorado State University<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)491-0695        | 50     | 09/90 | 2,000<br>0    |
| MWR | SACN | Status and Distribution of Stream Dragonflies.                  | Smith, W. A.<br>WI Department of Natural Resources<br>Box 7921<br>Madison, WI<br>53707 Phone: (608)266-0924  | 50     | 04/91 | 0<br>1,400    |
| MWR | SACN | Critical Habitat Use by Migrating Birds in the St. Croix Valley | Weisbrod, A. R.<br>National Park Service<br>Spring Creek Field Laboratory<br>Bell Museum of Natural History<br>Marine on St. Croix, MN<br>55047 Phone: (612)433-5663 | 57     | 01/91 | 1<br>0        |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| MWR | SACN | Lichens and Air Pollution in the St. Croix National Riverway.                    | Wetmore, C.<br>University of Minnesota<br>220 Biological Sciences Center<br>1445 Gortner Avenue<br>St. Paul, MN<br>55108 Phone: (612)625-1234                       | 50     | 01/91 | 1<br>0           |
| MWR | SCBL | Ecology of Burrowing Owls in Nebraska.   | Desmond, Ms. M. J.<br>University of Nebraska<br>Dept. Forestry, Fisheries, Wildlife<br>202 Natural Resources Hall<br>Lincoln, NE<br>68583-0819 Phone: (402)472-6826 | 50     | 12/90 | 0<br>21,500      |
| MWR | SCBL | Fire Ecology and Management of Scotts Bluff and Agate National Monuments.        | Dodd, Dr. J. L.<br>University of Wyoming<br>Department of Range Management<br>University Station, Box 3354<br>Laramie, WY<br>82071 Phone: (307)766-3666             | 60     | 12/90 | 10,000<br>0      |
| MWR | SCBL | Faunal Survey of Birds, Mammals, and Reptiles in Scotts Bluff National Monument. | Franklin, Dr. W. L.<br>Iowa State University<br>Department of Animal Ecology<br>124 Sciences II<br>Ames, IA<br>50010 Phone: (515)294-1240                           | 100    | 05/89 | 42,533<br>25,862 |
| MWR | SCBL | Ar-Ar Dating of Brule Formation Ash Beds of White River Group.                   | Swinehart, Mr. J. B.<br>University of Nebraska-Lincoln<br>Conservation and Survey Division<br>113 Nebraska Hall<br>Lincoln, NE<br>68588-0517 Phone: (402)472-7529   | 50     | 05/90 | 0<br>500         |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | SCBL | Vegetation Survey of Scotts Bluff and Agate Fossil Beds National Monuments.               | Weedon, Mr. R. R.<br>Natural Resources Enterprises, Inc.<br>703 Mears Street<br>Chadron, NE<br>69337 Phone: (308)432-4451                                 | 95     | 10/90 | 1<br>0        |
| MWR | SLBE | Long-Term Study of Canada Yew Reproductive Ecology.                                       | Allison, Dr. T. D.<br>Ohio State University<br>Botany Department<br>1465 Mt. Vernon Avenue<br>Marion, OH<br>43302 Phone: (614)389-6786                    | 33     | 12/99 | 0<br>1,600    |
| MWR | SLBE | Risk analysis of aquatic natural resources of SLBE  | Boyle, Dr. T. P.<br>Colorado State University<br>NPS-Water Resources Division<br>332 Aylesworth Hall NW<br>Fort Collins, CO<br>80521 Phone: (303)491-1452 | 10     | 12/92 | 75,000<br>0   |
| MWR | SLBE | Long-Term Vegetative and Topographic Monitoring on Sleeping Bear Dunes Plateau and Dunes. | Chubb, Dr. M.<br>Michigan State University<br>Department of Geography<br>315 Natural Science<br>East Lansing, MI<br>48823-1115 Phone: (517)353-9031       | 5      | 09/89 | 0<br>10,000   |
| MWR | SLBE | Waterfowl Survey in Sleeping Bear Dunes National Lakeshore                                | Holden, Mr. M. W.<br>Sleeping Bear Dunes NL<br>P.O. Box 277<br>Empire, MI<br>49630 Phone: (616)326-5134   | 60     | 12/92 | 200<br>400    |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | SLBE | North Manitou Island White-tailed Deer Population and Habitat Study.  | Holden, Mr. M. W.<br>Sleeping Bear Dunes NL<br>P.O. Box 277<br>Empire, MI<br>49630 Phone: (616)326-5134   | 50     | 12/92 | 5,000<br>0    |
| MWR | SLBE | Upland Sandpiper Population and Habitat Survey  | Holden, Mr. M. W.<br>Sleeping Bear Dunes NL<br>P.O. Box 277<br>Empire, MI<br>49630 Phone: (616)326-5134   | 20     | 12/93 | 1<br>0        |
| MWR | SLBE | Piping Plover Nesting Survey  | Holden, Mr. M. W.<br>Sleeping Bear Dunes NL<br>P.O. Box 277<br>Empire, MI<br>49630 Phone: (616)326-5134   | 20     | 12/95 | 500<br>0      |
| MWR | SLBE | Population Biology and Landscape Ecology of Dune Thistle (Cirsium pitcheri) in Great Lakes National Lakeshores. | McEachern, I. A. K.<br>Great Lakes Coop. Park Studies Unit<br>1040 WARF Building<br>610 Walnut St.<br>Madison, WI<br>53705 Phone: (608)262-2779 | 50     | 10/91 | 8,000<br>0    |
| MWR | SLBE | Evaluation of Piping Plover Habitat in the Great Lakes' National Lakeshores.                                    | Nordstrom, L. H.<br>University of Missouri-Columbia<br>112 Stephens Hall<br>Columbia, MO<br>65211 Phone: (314)882-3436                          | 85     | 04/90 | 3,000<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| MWR | SLBE | Bird Migration and Small Mammal Populations on The Manitou Islands.   | Scharf, Dr. W. C.<br>Northwestern Michigan College<br>P.O. Box 277<br>Traverse City, MI<br>49684 Phone: (616)922-1260                                     | 50     | 12/99 | 0<br>1,000   |
| MWR | VOYA | Habitat Assessment for Woodland Caribou at Voyageurs National Park.   | Associates, B. &.<br>P.O. Box 1425<br>International Falls, MN<br>56649 Phone: (000)000-0000   | 60     | 01/91 | 1<br>0       |
| MWR | VOYA | The Biology, Present Distribution, and Potential for Dispersal of Rainbow Smelt, with Particular Reference to Waters Affected by the Garrison Diversion Unit. | Barton, Dr. B. A.<br>University of North Dakota<br>Department of Biology<br>Box 8238, University Station<br>Grand Forks, ND<br>58202 Phone: (701)777-2621 | 50     | 06/91 | 1<br>0       |
| MWR | VOYA | A Structural-Metamorphic Transect of the Vermilion Granitic Complex, NE Minnesota.  | Bauer, Dr. R. L.<br>Universtiy of Missouri-Columbia<br>Department of Geology<br>101 Geology Building<br>Columbia, MI<br>65211 Phone: (314)882-3759        | 70     | 10/90 | 0<br>33,000  |
| MWR | VOYA | Acid Rain Wet Deposition.   | Bock, D. C.<br>Minnesota Pollution Control Agency<br>520 Lafayette Road<br>St. Paul, MN<br>55155 Phone: (612)296-7338                                     | 67     | 01/96 | 1<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MWR | VOYA | Bald Eagle Blood Collection for Contaminated Analysis.   | Bowerman, W. W.<br>Michigan State University<br>Department of Fish and Wildlife<br>Pesticide Research Center<br>East Lansing, MI<br>48824 Phone: (517)353-9195 | 50     | 05/90 | 0<br>12,350   |
| MWR | VOYA | Long Term Trends in Lake Chemistry Related to Acid Deposition in the Upper Great Lakes States. | Brezonik, P. L.<br>University of Minnesota-Minneapolis<br>Minneapolis, MN<br>55455 Phone: (612)624-9282  | 90     | 07/91 | 0<br>54,700   |
| MWR | VOYA | Status of the Eastern Taiga Merlin (Falco c. columbarius) in the Upper Midwest Region.         | Doolittle, T. C.<br>Apostle Island NL<br>Route 1, Box 4<br>Bayfield, WI<br>54814 Phone: (715)779-3397  | 60     | 01/92 | 0<br>2,000    |
| MWR | VOYA | Criteria Pollutant Monitoring.   | Flores, M.<br>NPS Air Quality Division<br>Permit Rev. & Tech. Support Branch<br>P.O. Box 25287<br>Denver, CO<br>80225 Phone: (303)969-2072                     | 35     | 01/98 | 1<br>0        |
| MWR | VOYA | Assessment of Mercury Toxicity in Selected Minnesota Lakes and Streams.                        | Glass, G. E.<br>US Environmental Protection Agency<br>Environmental Research Laboratory<br>6201 Congdon Boulevard<br>Duluth, MN<br>55804 Phone: (218)720-5526  | 67     | 07/91 | 0<br>2        |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| MWR | VOYA | Restore Absent and Declining Wildlife.   | Gogan, P. J.<br>Voyageurs NP<br>P.O. Box 50<br>International Falls, MN<br>56649 Phone: (218)283-9821  | 75     | 07/91 | 75,000<br>0   |
| MWR | VOYA | Wolf Research.   | Gogan, P. J.<br>Voyageurs NP<br>P.O. Box 50<br>International Falls, MN<br>56649 Phone: (218)283-9821  | 50     | 01/92 | 25,000<br>0   |
| MWR | VOYA | Using Geographic Information Systems to Assess Moose Habitat.  | Grigal, Professor, D. F.<br>University of Minnesota<br>Department of Soil Science<br>1991 Upper Buford Circle<br>St. Paul, MN<br>55108 Phone: (612)625-4232 | 40     | 10/91 | 0<br>39,300   |
| MWR | VOYA | Bald Eagle, Osprey, Great Blue Heron, Double-crested Cormorant, Common Tern, and Herring and Ring-billed Gull Surveys. | Grim, L. H.<br>Voyageurs NP<br>P.O. Box 50<br>International Falls, MN<br>56649 Phone: (218)284-9821   | 1      | 12/99 | 1<br>0        |
| MWR | VOYA | PCBs and Hg in the St. Louis & Mississippi Rivers & in Sandpoint and Crane Lakes.                                      | Helwig, D.<br>MN Pollution Control Agency<br>520 Lafayette Road<br>St. Paul, MN<br>55155 Phone: (612)296-7250   | 20     | 06/91 | 0<br>230,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| MWR | VOYA | Contaminant Analysis for Fish Advisories & Trend Analyses.                             | Helwig, D.<br>MN Pollution Control Agency<br>520 Lafayette Road<br>St. Paul, MN<br>55155 Phone: (612)296-7250  | 5      | 01/91 | 0<br>10,000   |
| MWR | VOYA | A Structural and Metamorphic Transect of the Vermilion Granitic Complex, NE Minnesota. | Hudleston, D.<br>Department of Geology & Geophysics<br>University of Minnesota-Minneapolis<br>310 Pillsbury Drive Southeast<br>Minneapolis, MN<br>55455 Phone: (612)624-1333 | 95     | 01/91 | 0<br>52,000   |
| MWR | VOYA | Regional Modeling of Trace Gas Production in Grassland and Boreal Ecosystems.          | Johnston, D.<br>University of Minnesota<br>Nat. Resources Research Institute<br>3151 Miller Trunk Highway<br>Duluth, MN<br>55811 Phone: (218)720-4271                        | 10     | 01/93 | 0<br>447,296  |
| MWR | VOYA | Aquatic Research - Voyageurs National Park.  | Kallemeyn, L. W.<br>Voyageurs NP<br>P.O. Box 50<br>International Falls, MN<br>56649 Phone: (218)283-9821   | 1      | 12/99 | 1<br>0        |
| MWR | VOYA | Visibility Monitoring.   | Malm, D.<br>NPS Air Quality Division<br>P.O. Box 25287<br>Fort Collins, CO<br>80225 Phone: (303)492-8292   | 35     | 01/98 | 1<br>0        |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| MWR | VOYA | Animal Influences on the Aquatic Landscape:<br>Vegetative Patterns, Successional<br>Transitions, and Nutrient Dynamics. | Naiman, D. J.<br>University of Washington<br>Center for Streamside Studies AR-10<br>Seattle, WA<br>98195 Phone: (206)543-6920                          | 28     | 00/99 | 0<br>755,676  |
| MWR | VOYA | Archeological Survey of Voyageurs National<br>Park.   | Richner, J. J.<br>Midwest Archeological Center<br>Federal Building, Room 474<br>100 Centennial Mall North<br>Lincoln, NE<br>68508 Phone: (402)437-5392 | 90     | 11/90 | 1<br>0        |
| MWR | VOYA | Food Habits of the Timber Wolf in Voyageurs<br>National Park.   | Schmidt, J. A.<br>St. Cloud State University<br>Dept. of Biology Science<br>St. Cloud, MN<br>56301 Phone: (612)255-2036                                | 60     | 12/99 | 0<br>250      |
| MWR | VOYA | Forest Ecosystem Dynamics.  | Shugart, D. H.<br>University of Virginia<br>Dept. of Environmental Sciences<br>Clark Hall<br>Charlottesville, VA<br>2903 Phone: (804)924-7761          | 80     | 07/90 | 0<br>1        |
| MWR | VOYA | Forest Ecosystem Dynamics.  | Smith, D. A.<br>NASA/Goddard Space Flight Center<br>Lab. for Terr. Physics, Bio. Sc. Br.<br>Code 623<br>Greenbelt, MD<br>20771 Phone: (301)286-8900    | 85     | 12/99 | 0<br>1        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$   |
|-----|------|---|---|--------|-------|----------------|
| MWR | VOYA | Aquatic Macrophyte Communities in Water-level Regulated Lakes at Voyageurs National Park. | Wilcox, D. A.<br>U.S. Fish and Wildlife Service<br>Nat'l Fisheries Center-Great Lakes<br>1451 Green Road<br>Ann Arbor, MI<br>48105 Phone: (313)994-3331       | 100    | 12/99 | 1<br>0         |
| MWR | WICR | Floristic Survey of Poaceae and Cyperaceae of the Wilson's Creek National Battlefield.    | Hassien, Mr. F. D.<br>Lincoln University<br>Box 21<br>Room 252 Founders Hall<br>Jefferson City, MO.<br>65101 Phone: (314)681-5134                             | 100    | 01/87 | 9,800<br>0     |
| MWR | WICR | Population Ecology of Lesquerella filiformis  | Jackson, Dr. J. R.<br>Missouri Southern State College<br>Biology Department<br>Joplin, MO<br>64801-1595 Phone: (417)625-9578                                  | 100    | 11/90 | 3,056<br>1,900 |
| MWR | WICR | Water Quality Work Plan for Wilson's Creek National Battlefield.                          | Kondratieff, B. C.<br>Colorado State University<br>Dept. of Entomology<br>Fort Collins, CO<br>80523 Phone: (303)491-7314                                      | 70     | 12/90 | 5,000<br>0     |
| MWR | WICR | Assessment of point and non-point sources on WICR   | Nimmo, Dr. D. W.<br>Colorado State University<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80523 Phone: (303)491-0695 | 25     | 12/90 | 2,000<br>0     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| MWR | WICR | Population Ecology and Management<br>Recommendations for <i>Lesquerella filiformis</i><br>at Wilson's Creek National Battlefield<br>Republic, Missouri. | Thomas, Ms. L. P.<br>Wilson's Creek National Battlefield<br>Postal Drawer C<br>Republic, MO<br>65738 Phone: (417) 48-2325 | 100    | 12/89 | 14,590<br>0   |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|--|--|--------|-------|-----------------|
| NAR | ACAD | The ecology and distribution of the Harlequin Duck ( <i>histrionicus histrionicus</i> ) wintering off Ilse Au Haut, Maine. | Anderson, J.<br>College of the Atlantic<br>Bar Harbor, ME<br>04609 Phone: (207)288-5015  | 75     | 03/89 | 1,000<br>300    |
| NAR | ACAD | Ecology of Jack Pine in Acadia Nat'l Park  | Conkey, L. E.<br>Dartmouth College<br>Fairchild Science Center<br>Hanover, NH<br>03755 Phone: (603)646-3381                                  | 65     | 09/89 | 10,000<br>0     |
| NAR | ACAD | Effects of Ozone on Vegetation of Acadia National Park   | Eckert, Dr. R.<br>University of New Hampshire<br>Dept. of Forest Resources<br>Durham, NH<br>03824 Phone: (603)862-2508                       | 20     | 09/95 | 0<br>99,000     |
| NAR | ACAD | Ozone effects Acadia   | Eckert, Dr. B.<br>University of New Hampshire<br>Dept. of Forest Resources<br>James Hall<br>Durham, NH<br>03824 Phone: (603)862-2508         | 15     | 10/94 | 70,000<br>0     |
| NAR | ACAD | Fire and Natural Resource Simulation System  | Garman, S.<br>University of Massachusetts<br>Dept. Forestry & Wildlife Mgmt.<br>Holdsworth Hall<br>Amherst, MA<br>01002 Phone: (413)545-2757 | 75     | 01/90 | 30,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$    |
|-----|------|--|--|--------|-------|------------------|
| NAR | ACAD | The Mayflies (Ephemeroptera) of Acadia National Park   | Gibbs, K. E.<br>University of Maine<br>Department of Entomology<br>Orono, ME<br>04469 Phone: (207)581-2965                                 | 100    | 04/88 | 11,458<br>3,820  |
| NAR | ACAD | Ticks and Lyme Disease in National Parks of the United States  | Ginsberg, H.<br>Rutgers University<br>Coastal & Environmental Studies<br>Doolittle Hall<br>New Brunswick, NJ<br>08903 Phone: (201)934-4882 | 80     | 12/89 | 78,000<br>39,000 |
| NAR | ACAD | Flora of Acadia National Park  | Greene, Dr. C.<br>College of the Atlantic<br>Bar Harbor, ME<br>04609 Phone: (207)288-5015  | 0      | 9/90  | 5,000<br>0       |
| NAR | ACAD | Inventory and Monitoring Strategy Plan Development for Acadia NP                                     | Greene, Dr. C.<br>College of the Atlantic<br>Bar Harbor, ME<br>04609 Phone: (207)288-5015  | 0      | 1/91  | 30,000<br>0      |
| NAR | ACAD | Occurrence, Distribution and Spatial Interactions Among Mammalian Carnivores in Acadia National Park | Harrison, Ms. D.<br>University of Maine<br>Wildlife Department<br>Orono, ME<br>04469 Phone: (207)581-2867                                  | 35     | 09/90 | 27,000<br>9,000  |

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|-----|------|---|---|--------|-------|---------------|
| NAR | ACAD | Establishment of a calibrated watershed/long term monitoring site at Acadia National Park, Maine  | Kahl, J. S.<br>University of Maine<br>Sawyer Environmental Research Ctr.<br>Orono, ME<br>04469 Phone: (207)581-3286                           | 50     | 11/89 | 45,000<br>0   |
| NAR | ACAD | Gravitational instability in coexisting layered Magmas, Isle Au Haut, Maine   | Rhodes, J. M.<br>University of Massachusetts<br>Dept. of Geology & Geography<br>Amherst, MA<br>01003 Phone: (413)545-2286                     | 5      | 08/91 | 0<br>2,100    |
| NAR | ACAD | The Limnological Effects of Fire  | Rhodes, T.<br>University of Maine<br>Department of Botany<br>Orono, ME<br>04469 Phone: (207)581-2979  | 50     | 12/89 | 0<br>0        |
| NAR | ACAD | The role of ozone and needle fungi in causing needleblight of Eastern White Pine in Acadia National Park  | Skelly, J. M.<br>The Pennsylvania State University<br>Department of Plant Pathology<br>108 Buckout Lab<br>University Park, PA<br>16802 Phone: | 0      | 12/89 | 0<br>40,000   |
| NAR | ACAD | Distribution patterns and health of Corticolous (barkdwelling) lichens on picea ruben (red spruce) in relation to acid fog, acid rain and ozone levels along coastal Maine. | Stubbs, C. S.<br>University of Maine<br>Dept. of Botany and Plant Pathology<br>Orono, ME<br>04469 Phone: (207)581-2981                        | 85     | 12/89 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| NAR | ACAD | Dragonflies and Damselflies of Acadia National Park and vicinity.   | White, Dr. H. B.<br>University of Delaware<br>Dept. of Chemistry and Biochemistry<br>Newark, DE<br>19716 Phone: (302)451-2908                     | 50     | 12/99 | 0<br>1,000    |
| NAR | BOST | Extent of Creosote-Related Contamination of Sediments in the Vicinity of Pier No. 2, Charlestown Navy Yard                      | Costa, H. J.<br>Batelle Ocean Sciences<br>397 Washington St.<br>Duxbury, MA<br>02332 Phone: (617)934-0571   | 100    | 10/88 | 23,000<br>0   |
| NAR | CACO | Holocene Environmental Evaluation of Peat Bog Near Coast Guard Beach, CACO  | Allen, Dr. J. R.<br>15 State St.<br>Boston, MA<br>02109 Phone: (617)565-8806  | 0      | 0/0   | 0<br>0        |
| NAR | CACO | Role of ORV on beach erosion and dune scarping at Race Point, CACO  | Allen, Dr. J. R.<br>15 State St.<br>Boston, MA<br>02109 Phone: (617)565-8806  | 0      | 0/0   | 8,000<br>0    |
| NAR | CACO | Demonstration of the use of 3-D ground water modeling for delineation of recharge zones of public-supply wells, Cape Cod, Mass. | Barlow, Dr. P. M.<br>Water Resources Division<br>US Geological Survey<br>28 Lord Road, Suite 280<br>Marlborough, MA<br>01752 Phone: (000)000-0000 | 60     | 5/90  | 0<br>134,000  |
| NAR | CACO | The Vascular Plants of Cape Cod and the Islands the Lichens of Cape Cod and the Island  | Buckley, Ms. A.<br>6192 SW 2nd St.<br>Plantation, FL<br>33317 Phone: (305)584-0729  | 25     | 0/0   | 0<br>0        |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End  | NP\$\$/Other\$   |
|-----|------|---|---|--------|------|------------------|
| NAR | CACO | Identification of risk factors associated with Lyme disease in employees of Cape Cod NS                         | Ciesielski, Dr. C.<br>Division of TB Control E-10<br>Centers for Disease Control<br>Atlanta, GA<br>30333 Phone: (000)000-0000   | 50     | 0/0  | 0<br>0           |
| NAR | CACO | Larval release rhythms in grass shrimp  | Douglas, Dr. J.<br>Yale University<br>Kline Biology Tower<br>New Haven, CT<br>06511 Phone: (203)432-3496  | 100    | 8/88 | 0<br>20          |
| NAR | CACO | The changing sulfur cycle of lakes: It's ecological significance in element cycle interactions and productivity | Gilblin, Dr. A. E.<br>Marine Biological Laboratory<br>The Ecosystems Center<br>Woods Hole, MA<br>02543 Phone: (000)000-0000   | 66     | 2/90 | 0<br>246,765     |
| NAR | CACO | Ticks and Lyme Disease in National Parks of the Eastern US  | Ginsberg, Mr. H.<br>Rutgers-The State University of NJ<br>Coastal and Environmental Studies<br>Doolittle Hall-Busch Campus<br>New Brunswick, NJ<br>08903 Phone: (201)932-4882 | 0      | 0/0  | 78,000<br>39,000 |
| NAR | CACO | Acid Rain Monitoring Project  | Godfrey, Dr. P. J.<br>University of Massachusetts<br>Water Resources Research Center<br>Blaisdell House<br>Amherst, MA<br>01003 Phone: (000)000-0000                          | 50     | 1/96 | 0<br>450         |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|---|--|--------|-------|------------------|
| NAR | CACO | Ecological Survey of Heathlands in Cape Cod National Seashore                                 | Godfrey, Dr. P. J.<br>University of Massachusetts<br>Botany Department<br>Amherst, MA<br>01003 Phone: (000)000-0000                                    | 98     | 2/89  | 46,296<br>13,699 |
| NAR | CACO | Effects of Human Recreation on Piping Plover Foraging Ecology and Chick Survival              | Griffin, Dr. C. R.<br>University of Massachusetts<br>Dept. Inland Fisheries & Wildlife<br>Holdsworth Hall<br>Amherst, MA<br>01003 Phone: (413)545-2757 | 50     | 8/89  | 0<br>18,000      |
| NAR | CACO | Population Dynamics, Management, and Breeding Ecology of Piping Plovers on Outer Cape Cod, MA | Griffin, Dr. C. R.<br>University of Massachusetts<br>Dept. Inland Fisheries & Wildlife<br>Holdsworth Hall<br>Amherst, MA<br>01003 Phone: (413)545-2757 | 0      |       | 20,000<br>5,000  |
| NAR | CACO | Data Collection In The Pamet River Basin  | Harleman, Dr. D. R.<br>Massachusetts Institute of Techn.<br>Parsons Laboratory 48 305<br>Cambridge, MA<br>02139 Phone: (617)253-2726                   | 10     | 5/90  | 0<br>7,500       |
| NAR | CACO | Effect of ozone injured milkweed on Monarch Butterfly growth and reproduction.                | Hughes, Dr. P.<br>Boyce Thompson Institute<br>BTI for Plant Res. @ Cornell Univ.<br>Tower Road<br>Ithaca, NY<br>14853 Phone: (607)254-1234             | 100    | 09/89 | 26,000<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$   |
|-----|------|--|---|--------|-------|------------------|
| NAR | CACO | Use of Ground-Penetrating Radar to determine Depth of Water Table  | Johnnson, Dr.<br>Phone: (000)000-0000   | 100    | 9/88  | 22,500<br>22,500 |
| NAR | CACO | Vegetation Communities In A Maritime Ecosystem                     | Kamman, Mr. N. C.<br>2 Spalding E. Shore<br>Colchester, VA<br>05446 Phone: (502)864-8127  | 90     | 3/8   | 0<br>1,000       |
| NAR | CACO | Native Revegetation Project for Gateway, Fire Island, and Cape Cod | Kuser, Dr. J. E.<br>Rutgers University<br>Cook College<br>P.O. Box 231<br>New Brunswick, NJ<br>08903 Phone: (201)932-9211                                 | 100    | 1/89  | 11,000<br>15,000 |
| NAR | CACO | Rare Plant Survey  | LeBlond, Mr. R.<br>Division of Fisheries & Wildlife<br>Mass. Natural Heritage Program<br>100 Cambridge Street<br>Boston, MA<br>02202 Phone: (617)727-9194 | 90     | 3/89  | 0<br>1,300       |
| NAR | CACO | Vegetation Study of Dune Wetlands                                  | Leblond, Dr. R.<br>Center for Coastal Studies<br>Box 826<br>Provincetown, MA<br>02657 Phone: (508)487-3622  | 80     | 12/89 | 1,200<br>1,700   |
| NAR | CACO | Mill Creek Water Budget Study                                      | Nuttle, Dr. W.<br>P.O. Box 3204<br>Charlottesville, VA<br>22903 Phone: (804)924-7761  | 10     | 1/90  | 6,000<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End  | NPSS/Other\$    |
|-----|------|--|---|--------|------|-----------------|
| NAR | CACO | Evaluation of Browntail Moth Suppression Project--1988   | O'Brien, Mr. J. T.<br>USDA Forest Service<br>P.O. Box 640<br>Durham, NH<br>03824 Phone:                                     | 100    | 2/89 | 0<br>30,000     |
| NAR | CACO | Effects of Gypsy Moth Defoliation On Oak Stands  | O'Brien, Mr. J. T.<br>USDA Forest Service<br>P.O. Box 640<br>Durham, NH<br>03824 Phone: (000)000-0000                       | 80     | 6/89 | 0<br>0          |
| NAR | CACO | Swamp Vegetation Monitoring  | Patterson III, Dr. W. A.<br>University of Massachusetts<br>204 Holdsworth Hall<br>Amherst, MA<br>01003 Phone: (413)554-5265 | 10     | 1/90 | 800<br>160      |
| NAR | CACO | The Effects of Mowing and Burning on the Reproduction of Huckleberry   | Patterson III, Dr. W. A.<br>University of Massachusetts<br>204 Holdsworth Hall<br>Amherst, MA<br>01003 Phone: (413)554-5265 | 0      |      | 18,100<br>3,620 |
| NAR | CACO | The composition and successional status of plant communities in the Atlantic white cedar swamp, Cape Cod National Seashore | Patterson III, Dr. W. A.<br>University of Massachusetts<br>204 Holdsworth Hall<br>Amherst, MA<br>01003 Phone: (413)554-5265 | 50     | 8/90 | 19,750<br>4,450 |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| NAR | CACO | Distribution, abundance+selected grey harbor seals in southern New England                                 | Payne, Dr. M.<br>Manamet Bird Observatory<br>Box 936<br>Manament, MA<br>02345 Phone: (000)000-0000  | 90     | 12/89 | 0<br>3,000    |
| NAR | CACO | Natural and Anthropogenic Limits on Deer Populations at Cape Cod   | Porter, Dr. W. F.<br>State University of New York<br>College of Environmental Science<br>and Forestry<br>Syracuse, NY<br>13210 Phone: (315)470-6798 | 50     | 10/90 | 25,000<br>0   |
| NAR | CACO | Develop and assess mathematical models of saltwater upcoming using wellsite #4 Data                        | Reilly, Dr. T. .<br>U.S. Geological Survey<br>411 National Center<br>Reston, VA<br>22092 Phone: (703)648-5006                                       | 100    | 4/87  | 0<br>0        |
| NAR | CACO | Wellfleet Eisleir  | Reimolo, Dr. R. J.<br>MEtcalf & Eaddy, Inc<br>P.O. Box 4043<br>Woburn, MA<br>01888 Phone: (000)000-0000   | 75     | 0/0   | 0<br>200,000  |
| NAR | CACO | Development of a prototype geographic information system design for North Atlantic Regional Parks, PHASE 2 | Sham, Dr. C.<br>Boston University<br>Department of Geography<br>675 Commonwealth Ave.<br>Boston, MA<br>02215 Phone: (617)353-5741                   | 40     | 8/89  | 7,000<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$     |
|-----|------|---|---|--------|-------|------------------|
| NAR | CACO | Invertebrate survey of the ponds on the Cape Cod National Seashore  | Smith, Dr. D. G.<br>University of Massachusetts<br>Department of Zoology<br>Amherst, MA<br>01003-0027 Phone:  | 50     | 0/0   | 0<br>200         |
| NAR | CACO | Observation well network  | Socodow, Dr. R.<br>U.S. Geological Survey<br>28 Lord Road, Suite 280<br>Marlborough, MA<br>01752 Phone: (000)000-0000                                   | 0      | 0/0   | 0<br>1,000       |
| NAR | CACO | Rare Plant Survey for Cape Cod National Seashore  | Sorrie, Dr. B. A.<br>Division of Fish. & Wildlife<br>Mass. Ntrl Heritage & Endgrd.Spp.<br>100 Cambridge St.<br>Boston, MA<br>02202 Phone: (000)000-0000 | 100    | 12/89 | 0<br>5,000       |
| NAR | CACO | Finfish Inventory Jamaica Bay   | Sperry, Dr. T.<br>Seatuck National Wildlife Refuge<br>U.S. Fish and Wildlife Service<br>P.O. Box 369<br>Islip, NY<br>11751 Phone: (000)000-0000         | 0      | 0/0   | 50,000<br>0      |
| NAR | CACO | Historic and Prehistoric Trends in Pond Acidity in the Cape Cod National Seashore as Interpreted from Diatom Assemblage Changes | Winkler, Dr. M. G.<br>University of Wisconsin<br>Center for Climatic Research<br>1225 W. Dayton St.<br>Madison, WI<br>53706 Phone: (608)262-0775        | 80     | 8/89  | 22,000<br>10,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| NAR | CACO | Recent Changes in Trophic Structure of Duck and Bennett Ponds, Provincetown, Relative to Possible Landfill Enrichment                                  | Winkler, Dr. M. G.<br>University of Wisconsin<br>Center for Climatic Research<br>1225 W. Dayton St.<br>Madison, WI<br>53706 Phone: (608)262-0775 | 0      | 0/0   | 0<br>0       |
| NAR | FIIS | Interactions of Vegetation and Visitors in Fire Island N.S. Wilderness Area.   | Ehrenfeld, Dr. J. G.<br>Rutgers University<br>Coastal & Environmental Studies<br>New Brunswick, NJ<br>08903 Phone: (201)932-3609                 | 90     | 03/89 | 0<br>0       |
| NAR | FIIS | Ticks and Lyme Disease in National Parks of the Eastern United States.   | Ginsberg, Dr. H.<br>Rutgers University<br>Coastal & Environmental Studies<br>Doolittle Hall<br>New Brunswick, NJ<br>08903 Phone: (201)932-4882   | 0      | 01/90 | 78<br>39     |
| NAR | FRLA | Development of a computer mapping or CAD system linked with a data base for application in historic landscape restoration and preservation activities. | Sham, Dr. C.<br>Boston University<br>Department of Geology<br>675 Commonwealth Avenue<br>Boston, MA<br>02215 Phone: (617)353-5741                | 50     | 05/89 | 6,000<br>0   |
| NAR | GATE | Landfill Seep Identification, Leachate Contaminants Analysis and Photo documentation of Hazardous Materials Disposal Practices                         | Ahlert, Dr. R.<br>Rutgers University<br>Department of Chemical Engineering<br>Busch Campus<br>New Brunswick, NJ<br>08903 Phone: (000)000-0000    | 75     | 0/90  | 120,000<br>0 |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| NAR | GATE | Ecology of Holly Forest in Sandy Hook, Gateway NRA  | Art, Dr. H.<br>Williams College<br>Biology Dept.<br>Williamstown, MA<br>01267 Phone:   | 100    | 1/89  | 5,000<br>0      |
| NAR | GATE | Amphibian and Reptile Community Restoration   | Behler, Dr. J.<br>Herpetological Department<br>New York Zoological Society<br>Bronx Zoological Park<br>Bronx, NY<br>10460 Phone: (000)000-0000                         | 60     | 12/95 | 26,000<br>4,000 |
| NAR | GATE | Effects of Landfill Effluents on Subtidal Invertebrates   | Borowsky, Dr. B.<br>New York Zoological Society<br>Osborn Laboratory of Marine Science<br>NY Aquarium, Boardwalk at W8th<br>Brooklyn, NY<br>11224 Phone: (000)000-0000 | 2      | 7/92  | 20,000<br>0     |
| NAR | GATE | A Comparison of Plankton and Primary Productivity in the Waters of the Gateway National Recreation Area | Cosper, Dr. E. M.<br>Marine Sciences Research Center<br>Stony Brook, NY<br>11794-5000 Phone: (000)000-0000   | 100    | 2/89  | 7,500<br>0      |
| NAR | GATE | Amphipod Species Population Dynamics, Jamaica Bay   | Franz, Dr. D.<br>Brooklyn College<br>Biology Department<br>Brooklyn, NY<br>11210 Phone: (718)780-5396  | 15     | 6/90  | 9,000<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| NAR | GATE | Breezy Point Surf Clam ( <i>Spisula solidissima</i> )<br>Population Age Structure                       | Franz, Dr. D. R.<br>Brooklyn College<br>Biology Department<br>Brooklyn, NY<br>11210 Phone: (000)000-0000   | 100    | 3/88  | 5,000<br>0    |
| NAR | GATE | Bioaccumulation of Polynuclear Aromatics in<br>the American Lobster, ( <i>Homarus americanus</i><br>L.) | Molof, Dr. A.<br>Polytechnic University<br>Dept. of Environ. & Civil Eng.<br>333 Jay Street<br>Brooklyn, NY<br>11201 Phone: (000)000-0000        | 10     | 2/94  | 6,000<br>0    |
| NAR | GATE | Finfish Inventory Jamaica Bay   | Sperry, Dr. T.<br>U.S. Fish & Wildlife Service<br>Seatuck National Wildlife Refuge<br>P.O. Box 369<br>Islip, NY<br>11751 Phone:                  | 0      | 06/88 | 50,000<br>0   |
| NAR | GATE | Histopathological Investigation and PCB<br>Contamination Level in Winter Flounder,<br>Jamaica Bay.      | Sperry, Dr. T. A.<br>U.S. Fish & Wildlife Service<br>Seatuck National Wildlife Refuge<br>P.O. Box 369<br>Islip, NY<br>11751 Phone: (000)000-0000 | 90     | 6/89  | 20,000<br>0   |
| NAR | MULT | Ecology, Population Health and Management of<br>Coastal Shore and Waterbirds                            | Buckley, Dr. P. A.<br>University of Rhode Island-CPSU<br>Graduate School of Oceanography<br>Narragansett, RI<br>02882 Phone: (401)792-6419       | 0      | 11/90 | 60,000<br>0   |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| NAR | MULT | Inventory and Conservation of Genetic Resources of Historically Significant Fruit Trees in the NP System | Coli, Dr. B.<br>University of Massachusetts<br>Dept. of Entomology<br>Fernald Hall<br>Amherst, MA<br>01003<br>Phone: (413)545-2283  | 30     | 12/90 | 20,000<br>0  |
| NAR | MULT | Ecology and Ecosystem Restoration of North Atlantic Coastal Wetlands                                     | Soukup, Dr. M.<br>University of Rhode Island<br>Graduate School of Oceanography<br>Narragansett, RI<br>02882<br>Phone: (401)792-6419  | 0      | 11/90 | 128,000<br>0 |
| NAR | MULT | Evaluation of National Natural Landmarks in the New England Adirondack Region                            | Worley, Dr. I.<br>University of Vermont<br>Botany Dept.<br>Burlington, VT   | 0      | 9/90  | 1,800<br>0   |
| NAR | ROVA | Effects of Largescale Tree Removal and Hydromulching on the Nutrient Dynamics of a Small Stream          | Hill, Dr. B. H.<br>Marist College<br>Biology Department<br>Poughkeepsie, NY<br>12601<br>Phone: (914)471-3240  | 50     | 05/89 | 0<br>1,000   |
| NAR | ROVA | Conduct Survey Of Threatened Species Of Turtle   | Klemens, Dr. M. W.<br>American Museum of Natural History<br>Department Of Herpetology<br>Central Park West & 79th St.<br>New York City, NY<br>10024<br>Phone: (212)768-5850 | 50     | 08/89 | 10,000<br>0  |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| NAR | ROVA | A Year-Long Investigation of the Micro-benthic Community in Roosevelt Cove (Home of FDR NHS), with Emphasis on the Protozoa | Perrotte, Dr. W. T.<br>Marist College<br>Biology Department<br>Poughkeepsie, NY<br>12601-1381 Phone: (914)471-3240                          | 40     | 07/89 | 0<br>18,000   |
| NAR | SARA | The Influence of Gray dogwood (Cornus Racemosa) on Secondary Succession and Forest Regeneration at the Saratoga NHP (SNHP). | Burgess, Dr. R.<br>State Univ. of New York-Syracuse<br># 8 Illick Hall<br>Syracuse, NY<br>13210 Phone: (315)470-6741                        | 70     | 10/89 | 5,500<br>0    |
| NAR | SARA | The Interaction of White Tailed Deer and Vegetation on the Saratoga National Historical Park (SNHP).                        | Porter, Dr. W. F.<br>State Univ. of New York-Syracuse<br>242 Illick Hall<br>Syracuse, NY<br>13210 Phone: (315)470-6798                      | 80     | 05/90 | 29,500<br>0   |
| NAR | SARA | Saratoga NHP Exotic Plant Inventory   | Stalter, Dr. R. K.<br>St. Johns University<br>Biology Dept.<br>Grand Central & Utopia Parkways<br>Jamaica, NY<br>11439 Phone: (718)990-6161 | 60     | 10/89 | 1,600<br>0    |
| NAR | WORI | Manage Historic Trees at Elizabeth Cady Stanton House   | Marion, Dr. D. F.<br>Community College of Finger Lakes<br>Plant Pathology Dept.<br>Canandaigua, NY<br>14424 Phone: (716)394-6706            | 100    | 9/88  | 3,500<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| NCR | CATO | Dogwood Anthracnose   | Redlin, Dr. S. .<br>USDA Agricultural Research Service<br>Beltsville Agricultural<br>Research Center<br>Beltsville, MD<br>20705 Phone: (301)344-3366 | 20     | 09/92 | 27,500<br>0  |
| NCR | CATO | Freshwater Fish, Water Quality,<br>Macroinvertebrate of Catoctin Mountain Park<br>- 1989    | Rivers, S. E.<br>Maryland Dept. of Natural Resources<br>Tawes State Office Bldg.<br>580 Taylor Ave.<br>Annapolis, MD<br>21401 Phone: (301)791-4736   | 100    | 12/89 | 0<br>3,000   |
| NCR | CATO | Catoctin Mountain Park White-tailed Deer<br>Research: 1988-1990                             | Roddy, D.<br>USDI, National Park Service<br>Catoctin Mountain Park<br>6602 Foxville Road<br>Thurmont, MD<br>21788 Phone: (301)293-9536               | 100    | 12/89 | 2,500<br>0   |
| NCR | CATO | Population and Ecological Characteristics of<br>White-tailed Deer on Catoctin Mountain Park | Warren, R. J.<br>CPSU/The University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: (404)542-5856                            | 100    | 03/90 | 20,000<br>0  |
| NCR | CATO | 1989 Gypsy Moth IPM Program Activities -<br>Catoctin Mountain Park                          | Whiteman, R. L.<br>USDA, Forest Service<br>180 Canfield Street<br>Morgantown, WV<br>26505 Phone: (304)291-4133                                       | 100    | 12/89 | 0<br>0       |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| NCR | HAFE | Special Boundary Study  | Edlund, Mr. C.<br>National Park Service<br>P.O. Box 25287<br>Denver, CO<br>80225 Phone: (303)969-2410                                | 100    | 02/90 | 150,000<br>0  |
| NCR | HAFE | Package 116 Historic Structures Report,<br>Historic Data Section                                    | Fisher, Mr. P.<br>University of Maryland<br>Department of History<br>College Park, MD<br>20742-7315 Phone: (304)535-6441             | 90     | 09/90 | 80,000<br>0   |
| NCR | HAFE | Economic Impact Analysis of Harpers Ferry<br>Special Boundary Study Land Protection<br>Alternatives | Polhemus, Mr. V.<br>The Greeley-Polhemus Group, Inc.<br>105 South Street<br>West Chester, PA<br>19382 Phone: (215)692-2224           | 100    | 04/90 | 30,000<br>0   |
| NCR | HAFE | Package 116, Historic Structures Report,<br>Archeological Data Section                              | Schakle, Mr. P.<br>National Park Service<br>Harpers Ferry NHP<br>P.O. Box 65<br>Harpers Ferry, WV<br>25425 Phone: (304)535-6065      | 100    | 09/89 | 260,000<br>0  |
| NCR | NACC | Landscape Management Information System   | Esse, S. M.<br>University of District of Columbia<br>4200 Connecticut Avenue, N.W.<br>Washington, D.C.<br>20008 Phone: (202)282-7379 | 50     | 12/90 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| NCR | NACC | National Turfgrass Evaluation Program - NCR Urban Studies 1. 1985 Kentucky Bluegrass Trials 2. 1985 Perennial Ryegrass Trials 3. 1987 Tall Fescue Trials      | Patterson, Mr. J. C.<br>NPS - National Capital Region<br>Center for Urban Ecology<br>1100 Ohio Dr., SW<br>Washington, D.C.<br>20242 Phone: (202)342-1443 | 90     | 09/90 | 1,000<br>0   |
| NCR | NACC | Micromorphologic analysis of soil thin sections obtained from compacted soils.  | Patterson, Mr. J. C.<br>NPS - National Capital Region<br>Center for Urban Ecology<br>1100 Ohio Dr., SW<br>Washington, D.C.<br>20242 Phone: (202)342-1443 | 10     | 06/92 | 62,500<br>0  |
| NCR | NACC | 1. Zoysia/Tall fescue sod adaptation on the National Mall. 2. Soil modification of zoysia/tall fescue plots to enhance turfgrass root growth and penetration. | Patterson, Mr. J. C.<br>National Park Service<br>Center for Urban Ecology<br>1100 Ohio Dr., SW<br>Washington, D.C.<br>20242 Phone: (202)342-1443         | 20     | 09/92 | 1,000<br>0   |
| NCR | NACC | Study of soil atmosphere in natural and highly man-influenced soils in Washington, D.C.   | Short, Mr. J. R.<br>National Park Service<br>Center for Urban Ecology<br>1100 Ohio Drive, S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443         | 20     | 09/91 | 58,750<br>0  |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| NCR | NACC | Characterization and taxonomy of highly man-influenced soils of the National Mall and the Washington Monument Grounds. | Short, Mr. J. R.<br>National Park Service<br>Center for Urban Ecology<br>1100 Ohio Drive, S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443 | 40     | 09/91 | 58,750<br>0    |
| NCR | NACC | Screening and Identification of American Cell Lines for Resistance to Dutch Elm Disease                                | Sticklen, Dr. M. B.<br>Michigan State University<br>Pesticide Research Center<br>East Lansing, MI<br>48824 Phone: (517)353-9140                  | 10     | 08/92 | 24,635<br>0    |
| NCR | NACE | Kenilworth Marsh Water Quality Monitoring Project  | Hammerschlag, Dr. R. S.<br>National Park Service<br>1100 Ohio Drive, CUE<br>Washington, D.C.<br>20242 Phone: (202)342-1443                       | 50     | 12/99 | 5,000<br>0     |
| NCR | PRWI | Lepidoptera Survey   | Lipford, Mr. M. L.<br>Virginia Natural Heritage Program<br>230 Governor Street<br>Suite 402<br>Richmond, VA<br>23219 Phone: (804)786-7951        | 100    | 09/89 | 2,500<br>0     |
| NCR | PRWI | Herpetological Survey  | Lipford, Mr. M. L.<br>Virginia Natural Heritage Program<br>230 Governor Street<br>Suite 402<br>Richmond, VA<br>23219 Phone: (804)786-7951        | 100    | 07/89 | 2,500<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|--|--|--------|-------|------------------|
| NCR | PRWI | Exotic Plant Ecology and Management  | Thomas, Jr., Mr. L. K.<br>National Park Service<br>Center for Urban Ecology<br>1100 Ohio Dr., S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443 | 50     | 12/99 | 0<br>0           |
| NCR | PRWI | Wildlife Study: Prince William Forest Park   | Tice, Mr. D. A.<br>North American Resource Management<br>P.O. Box 6777<br>Charlottesville, VA<br>22906 Phone: (804)293-8733                          | 100    | 12/89 | 13,900<br>0      |
| NCR | PRWI | Comparative Soil Moisture Studies in Populations of <i>Isotria Medeoloides</i> and <i>I. Verticillata</i> in Virginia                | Ware, Ms. D. M.<br>The College of William and Mary<br>Herbarium<br>Department of Biology<br>Williamsburg, VA<br>23185 Phone: (804)253-4240           | 100    | 03/88 | 890<br>0         |
| NCR | PRWI | Comparative Studies of the Population Ecology of <i>Isotria medeoloides</i> and <i>I. verticillata</i> in Prince William Forest Park | Ware, Ms. D. M.<br>The College of William and Mary<br>Herbarium<br>Department of Biology<br>Williamsburg, VA<br>23185 Phone: (804)253-4240           | 100    | 03/89 | 2,380<br>0       |
| NCR | ROCR | Plant Inventory  | Fleming, Ms. M. M.<br>National Park Service<br>Rock Creek Park<br>5000 Glover Rd., N.W.<br>Washington, D.C.<br>20015 Phone: (202)426-6834            | 80     | 12/91 | 20,000<br>10,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$    |
|-----|------|--|--|--------|-------|------------------|
| NCR | ROCR | Breeding Bird Census   | Ford, Mr. R. B.<br>National Park Service<br>Rock Creek Park<br>5000 Glover Rd., N.W.<br>Washington, D.C.<br>20015 Phone: (202)426-6834             | 60     | 07/99 | 0<br>0           |
| NCR | ROCR | Raccoon Ecology Study  | Hadidian, Dr. J.<br>National Park Service<br>Center for Urban Ecology<br>National Capital Region<br>Washington, D.C.<br>20242 Phone: (202)342-1443 | 60     | 12/91 | 0<br>20,000      |
| NCR | ROCR | Protozoan and Helminth Parasities<br>Transmissible to Humans in an Urban Raccoon<br>Population   | Hadidian, Dr. J.<br>National Park Service<br>1100 Ohio Drive, S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443                               | 70     | 09/90 | 1,500<br>2,000   |
| NCR | ROCR | Population Estimates Using Mark-Recapture<br>Techniques in an Urban Raccoon Population.  | Hadidian, Dr. J.<br>National Park Service<br>1100 Ohio Drive, S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443                               | 80     | 05/90 | 3,500<br>0       |
| NCR | ROCR | Raccoon Ecology, Population Dynamics and<br>Rabies Epizootiology: Juvenile Mortality and<br>Familial Associations in an Urban Raccoon<br>Population. | Hadidian, Dr. J.<br>National Park Service<br>National Capital Region<br>1100 Ohio Drive, S.W.<br>Washington, D.C.<br>20242 Phone: (202)342-1443    | 50     | 06/90 | 30,000<br>20,000 |



| Reg | Park | Project Title                              | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| NCR | ROCR | Rock Creek Fish Study                      | Mudre, Dr. J.<br>International Science & Technology<br>100 Carpenter Dr., Suite 206<br>Sterling, VA<br>22170 Phone: (703)471-4261                      | 50     | 10/91 | 85,000<br>0  |
| NCR | ROCR | Lichen Flora of Washington DC and Vicinity | Pittam, Ms. S. K.<br>Smithsonian Institution<br>National Museum of Natural History<br>Botany/NHB 166<br>Washington, D.C.<br>20560 Phone: (202)357-2545 | 40     | 10/91 | 0<br>0       |
| NCR | ROCR | Japanese Knotweed Control                  | Seiger, Ms. L.<br>George Washington University<br>Dept. of Biological Sciences<br>Washington, D.C.<br>20052 Phone: (202)994-7119                       | 75     | 12/90 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| PNR | CIRO | Cultural Resources Inventory   | Chance, Mr. D.<br>502 East C Street<br>Moscow, ID<br>83843 Phone: (208)883-1080   | 90     | 12/89 | 17,600<br>0   |
| PNR | CIRO | Behavior, Ecology, and Conservation of Mountain Lions in Fragmented Habitat. | Laundre', Mr. J. W.<br>Idaho State University<br>Dept. of Biological Sciences<br>Pocatello, ID<br>83209 Phone: (208)236-3765        | 30     | 12/95 | 0<br>30,000   |
| PNR | CRLA | Red Fir and Fire Dynamics  | Agee, Mr. J. K.<br>Univeristy of Washington<br>College of Forest Resources<br>Seattle, WA<br>98195 Phone: (206)543-2688             | 20     | 07/91 | 3,000<br>0    |
| PNR | CRLA | A Qualitative Investigation of the Benthic Macroinvertebrate Fauna           | Anderson, Mr. N. H.<br>Oregon State University<br>Department of Entomology<br>Corvallis, OR<br>97331 Phone: (503)737-4597           | 75     | 06/90 | 9,500<br>0    |
| PNR | CRLA | Volcanic Evolution   | Bacon, Mr. C. R.<br>U.S. Geological Survey<br>Mail Stop 910<br>345 Middlefield Road<br>Menlo Park, CA<br>94025 Phone: (415)329-5246 | 70     | 00/99 | 0<br>120      |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$     |
|-----|------|--|--|--------|-------|-------------------|
| PNR | CRLA | Fish Survey of Selected Streams                            | Buktenica, Mr. M.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 25     | 03/91 | 0<br>0            |
| PNR | CRLA | Ecology of Kokanee Salmon and Rainbow Trout                | Buktenica, Mr. M.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 0      | 00/99 | 1,000<br>0        |
| PNR | CRLA | Hydrothermal Processes                                     | Collier, Mr. R. W.<br>Oregon State University<br>College of Oceanography<br>Corvallis, OR<br>97331 Phone: (503)737-2895                | 75     | 06/91 | 309,000<br>44,000 |
| PNR | CRLA | Visibility Monitoring                                      | Core, Mr. J.<br>Dept. of Environmental Quality<br>811 SW Sixth Ave<br>Portland, OR<br>97204 Phone: (503)229-5380                       | 0      | 00/99 | 0<br>1,000        |
| PNR | CRLA | Particle Fluxes and Their Relationship to Nutrient Cycling | Dymond, Mr. J.<br>Oregon State University<br>College of Oceanography<br>Corvallis, OR<br>97331 Phone: (503)737-2296                    | 70     | 09/92 | 0<br>10,000       |

| Reg | Park | Project Title                                   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| PNR | CRLA | Quantification of Federal reserved water rights | Haas, Dr. G. E.<br>Colorado State University<br>Rec. Res. & Landscape Architecture<br>233 Forestry Bldg.<br>Ft. Collins, CO<br>80523 Phone: (303)491-5126 | 20     | 01/91 | 11,000<br>0  |
| PNR | CRLA | Hydrologic Benchmark Station                    | Kraus, Mr. R.<br>United States Geological Survey<br>1019 N Riverside<br>Medford, OR<br>97501 Phone: (503)776-4256   | 0      | 00/99 | 0<br>10,980  |
| PNR | CRLA | Crater Lake Ecosystem Study                     | Larson, Mr. G. L.<br>Oregon State University<br>National Park Service, CPSU<br>School of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-2043          | 70     | 09/92 | 150,000<br>0 |
| PNR | CRLA | Quantification of Federal Reserved Water Rights | Larson, Dr. G.<br>NPS-Coop. Park Studies Unit<br>Oregon State University<br>College of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-1498            | 0      | 10/91 | 7,000<br>0   |
| PNR | CRLA | Visibility Monitoring and Data Analysis         | Malm, Mr. W. C.<br>Colorado State University<br>Visibility Monitoring and Data Anal<br>Fort Collins, CO<br>80523 Phone: (303)491-8292                     | 0      | 00/99 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| PNR | CRLA | Historic American Building Survey (HABS) Documentation            | Mark, Mr. S. R.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 100    | 12/89 | 4,500<br>0   |
| PNR | CRLA | Planning and Development at Rim Village 1902 - 1989               | Mark, Mr. S. R.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 100    | 12/89 | 3,500<br>0   |
| PNR | CRLA | Physical History Chronology of Crater Lake Lodge                  | Mark, Mr. S. R.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 50     | 02/90 | 2,000<br>0   |
| PNR | CRLA | Preliminary Habitat Use Assessment of the White-Headed Woodpecker | Matthews, Ms. P.<br>Oregon Dept. Fish and Wildlife<br>61374 Parrell Road<br>Bend, OR<br>97702 Phone: (503)388-6363                   | 30     | 06/91 | 0<br>20,000  |
| PNR | CRLA | Phytoplankton Taxonomy and Ecology                                | McIntire, Mr. C. D.<br>Oregon State University<br>Dept. of Botany & Plant Pathology<br>Corvallis, OR<br>97331 Phone: (503)737-2490   | 63     | 02/92 | 15,000<br>0  |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| PNR | CRLA | Dutton Ridge Air Quality Camera Station               | Milestone, Mr. J. F.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 146<br>Crater Lake, OR<br>97604 Phone: (503)594-2211 | 20     | 10/97 | 200<br>0      |
| PNR | CRLA | Archeological Survey of Rim Village and Related Areas | Minor, Mr. R.<br>Heritage Research Associates, Inc.<br>1997 Garden Ave<br>Eugene, OR<br>97403 Phone: (503)485-0454                          | 90     | 02/90 | 10,000<br>0   |
| PNR | CRLA | Peregrine Falcon Nesting Enhancement                  | Opp, Mr. R.<br>Oregon Dept. of Fish & Wildlife<br>1400 Miller Island Road<br>Klamath Falls, OR<br>97603 Phone: (503)883-5732                | 100    | 10/89 | 800<br>1,700  |
| PNR | CRLA | Quantification of Federal reserved water rights       | Pettee, Mr. C. W.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8321           | 40     | 10/91 | 18,000<br>0   |
| PNR | CRLA | Deep Benthic Flora                                    | Phinney, Mr. H. K.<br>Oregon State University<br>Dept. of Botany and Plant Pathology<br>Corvallis, OR<br>97331 Phone: (503)737-2174         | 30     | 08/91 | 0<br>22,000   |

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| Reg | Park | Project Title                              | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| PNR | CRLA | Rare and Endemic Plant Survey              | Smith, Ms. M.<br>National Park Service<br>Crater Lake National Park<br>P.O. Box 7<br>Crater Lake, OR<br>97604 Phone: (503)594-2211               | 100    | 10/89 | 500<br>0       |
| PNR | CRLA | Geothermal Resources                       | Thompson, Mr. J. M.<br>U.S. Geological Survey<br>345 Middlefield Road<br>Menlo Park, CA<br>94025 Phone: (415)329-5247                            | 90     | 00/99 | 0<br>5,000     |
| PNR | CRLA | Archeological Overview and Research Design | Winthrop, Mr. R.<br>Winthrop and Associates<br>Ashland, OR<br>97520 Phone: (206)442-0791   | 50     | 08/90 | 28,000<br>0    |
| PNR | CRLA | Mechanics of the Eruption of Mount Mazama  | Young, Mr. S. R.<br>Lancaster University<br>Volcanology Research Group<br>Division of Environmental Science<br>Lancaster, U.K.<br>LA1 LYQ Phone: | 75     | 10/90 | 0<br>0         |
| PNR | CRLA | Geology - Climate - Soil                   | Young, Mr. S. R.<br>Lancaster University<br>Volcanology Research Group<br>Division of Environmental Science<br>Lancaster, U.K.<br>LA1 4YQ Phone: | 75     | 10/90 | 0<br>0         |

| Reg | Park | Project Title                        | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--------------------------------------|--|--------|-------|---------------|
| PNR | CRMO | Environmental Monitoring             | Graham, Mr. B. W.<br>Idaho State University<br>College of Pharmacy<br>Pocatello, ID<br>83204 Phone: (208)236-3475                                  | 0      | 12/99 | 0<br>150      |
| PNR | CRMO | Ecology of the Blind Cave Beetle     | Johnson, Mr. P. J.<br>University of Wisconsin<br>Department of Entomology<br>Madison, WI<br>53706 Phone: (608)262-2078                             | 30     | 12/90 | 0<br>0        |
| PNR | CRMO | Geological History                   | Kuntz, Mr. M. A.<br>U.S. Geological Survey<br>MS913, Box 25046<br>Denver Federal Center<br>Denver, CO<br>80225 Phone: (303)236-1293                | 100    | 12/89 | 0<br>100,000  |
| PNR | CRMO | Pollination Ecology of Mimulus Nanus | Luce, Ms. S.<br>Idaho State University<br>Department of Biological Sciences<br>Campus Box 8007<br>Pocatello, ID<br>83209-0009 Phone: (208)236-3765 | 90     | 12/90 | 0<br>15       |
| PNR | CRMO | Mineral Trace Elements               | Moye, Mr. F. J.<br>Idaho State University<br>Department of Geology<br>Pocatello, ID<br>83209 Phone: (208)236-3365                                  | 100    | 12/89 | 0<br>0        |



| Reg | Park | Project Title                               | Investigator/Address/Phone   | % done | End   | NPS\$/Others\$ |
|-----|------|---|--|--------|-------|----------------|
| PNR | CRMO | Baseline Resource Inventory - Lichens       | Pearson, Mr. L. C.<br>Ricks College<br>Department of Sciences<br>Rexberg, ID<br>83440<br>Phone: (208)356-2011  | 100    | 01/90 | 3,000<br>0     |
| PNR | CRMO | Baseline Resource Inventory - Fire Ecology  | Wright, Mr. R. G.<br>NPS-Coop. Park Studies Unit<br>University of Idaho<br>College of Forestry<br>Moscow, ID<br>83843<br>Phone: (208)885-7990                    | 90     | 03/90 | 25,000<br>0    |
| PNR | CRMO | An Analysis of Long-term Vegetation Changes | Wright, Mr. R. G.<br>NPS-Coop. Park Studies Unit<br>University of Idaho<br>College of Forestry<br>Moscow, ID<br>83843<br>Phone: (208)885-7990                    | 80     | 12/90 | 1,000<br>0     |
| PNR | FOCL | Survey of Cultural Resources                | Thomas, Mr. B.<br>Eastern Washington University<br>Archaeological & Historical Service<br>313 Monroe Hall, MS-168<br>Cheney, WA<br>99004<br>Phone: (509)359-2289 | 100    | 03/89 | 3,000<br>0     |
| PNR | HAFO | Late Cenozoic Mammalian Biochronology       | Repenning, Mr. C. A.<br>U.S. Geological Survey, MS 919<br>Federal Center, Box 25046<br>Denver, CO<br>80225<br>Phone: (303)236-9824                               | 70     | 00/99 | 0<br>100,000   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|---|--|--------|-------|------------------|
| PNR | HAFO | Botanical Identification  | Weasma, Mr. T. R.<br>P.O. Box 5621<br>Boise, ID<br>83705-0621 Phone:   | 80     | 11/91 | 0<br>2,000       |
| PNR | JODA | Paleontological Monitoring  | Fremd, Mr. T. J.<br>National Park Service<br>John Day Fossil Beds Nat'l Monument<br>420 W. Main Street<br>John Day, OR<br>97845 Phone: (503)575-0721   | 0      | 00/99 | 0<br>0           |
| PNR | JODA | Taphonomy and Paleocology of the Turtle<br>Cove Member of the John Day Formation            | Fremd, Mr. T. J.<br>National Park Service<br>John Day Fossil Beds Nat'l Monument<br>420 West Main Street<br>John Day, OR<br>97845 Phone: (503)575-0721 | 40     | 05/91 | 0<br>0           |
| PNR | JODA | The Effects of Fire on Biological Diversity,<br>Site Productivity, and Ecosystems Processes | Kauffman, Mr. J. B.<br>Oregon State University<br>Department of Rangeland Resources<br>Corvallis, OR<br>97331 Phone: (503)737-3341                     | 35     | 12/93 | 23,000<br>15,000 |
| PNR | MORA | Subalpine Fire Dynamics   | Agee, Mr. J. K.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2688                         | 95     | 04/90 | 0<br>0           |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| PNR | MORA | Long-term Monitoring of Avian Populations and Environmental Conditions                           | Aubry, Mr. K. B.<br>Forest Sciences Laboratory<br>3625 93rd Avenue Southwest<br>Olympia, WA<br>98502 Phone: (206)753-9494                                     | 90     | 04/90 | 0<br>39,000   |
| PNR | MORA | Assessment of Soil and Plant Development on the Kautz Creek Mudflow                              | Gessel, Mr. S.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)545-1931                                 | 1      | 06/92 | 0<br>500      |
| PNR | MORA | Liverworts   | Hong, Mr. W. S.<br>University of Great Falls<br>1301 20th Street South<br>Great Falls, MT<br>59405 Phone:   | 80     | 08/92 | 0<br>0        |
| PNR | MORA | Transportation Survey  | Johnson, Mr. D.<br>NPS-Coop. Park Studies Unit<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)545-7404 | 85     | 03/90 | 10,000<br>0   |
| PNR | MORA | A Study of Visitor Non-Compliance With Minimum Impact Behavioral Expectation in Paradise Meadows | Johnson, Mr. D.<br>NPS-Coop. Park Studies Unit<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)545-7404 | 100    | 03/89 | 5,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| PNR | MORA | Mammals and Their Ecosystems                                   | Johnson, Mr. M. L.<br>University of Washington, DB-10<br>Burke Memorial Museum<br>Seattle, WA<br>98195 Phone: (206)627-5697                      | 10     | 00/99 | 0<br>2,000    |
| PNR | MORA | Water Resources  | Larson, Mr. G. L.<br>NPS-Coop. Park Studies Unit<br>Oregon State University<br>School of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-2043 | 75     | 12/91 | 15,000<br>0   |
| PNR | MORA | Analysis of Genetic Inter-Relationships of Pedicularis Species | Macior, Mr. L.<br>The University of Akron<br>Biology Department<br>Akron, OH<br>44325-3908 Phone:  | 50     | 00/99 | 0<br>0        |
| PNR | MORA | Investigation of Occurrence of Spotted Frogs                   | McAllister, Mr. K.<br>Washington Department of Wildlife<br>600 North Capitol Way<br>Olympia, WA<br>98504-0091 Phone:                             | 33     | 10/90 | 0<br>3,000    |
| PNR | MORA | Volcanic History of the Tatoosh Igneous Complex                | Murphy, Mr. M.<br>Battelle Pac.N.W. Laboratories<br>Geophysics Sect. Geosciences Dept<br>P.O. Box 999<br>Richland, WA<br>99352 Phone:            | 100    | 12/89 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| PNR | MORA | Butterflies  | Pyle, Mr. R. M.<br>369 Loop Road<br>Grays River, WA<br>98621 Phone:   | 100    | 08/89 | 0<br>0        |
| PNR | MORA | Seismic Monitoring   | Qamar, Mr. A.<br>University of Washington<br>Geophysics Program, AK-50<br>Seattle, WA<br>98195 Phone: (206)545-7563                                 | 0      | 00/99 | 0<br>7,000    |
| PNR | MORA | Arthropods and Small Mammals Associated With<br>Montane Rivers | Rector, Mr. M.<br>University of Washington<br>College of Forest Resources, AR-10<br>Wildlife Group<br>Seattle, WA<br>98195 Phone: (206)543-7232     | 70     | 06/90 | 0<br>0        |
| PNR | MORA | Rare Plant Survey  | Rocheft, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 0      | 00/99 | 0<br>0        |
| PNR | MORA | Exotic Plant Distribution                                      | Rocheft, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 75     | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| PNR | MORA | Alpine Impact Survey  | Rochefort, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 0      | 00/99 | 22,000<br>0   |
| PNR | MORA | Muir Corridor Vegetation Study                                      | Rochefort, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 60     | 06/91 | 2,000<br>0    |
| PNR | MORA | Paradise Meadow Plan  | Rochefort, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 0      | 00/99 | 14,000<br>0   |
| PNR | MORA | Tree Establishment in Sub-alpine Meadows                            | Rochefort, Ms. R. M.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 50     | 00/99 | 0<br>0        |
| PNR | MORA | Inventory and Long-term Monitoring<br>Wilderness Crosscountry Zones | Samora, Ms. B. A.<br>National Park Service<br>Mount Rainier National Park<br>Longmire, WA<br>98397 Phone: (206)569-2211                               | 75     | 12/90 | 1,500<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|--|--|--------|-------|----------------|
| PNR | MORA | Lake Surveys   | Samora, Ms. B. A.<br>National Park Service<br>Mount Rainier National Park<br>Longmire, WA<br>98397 Phone: (206)569-2211                              | 0      | 00/99 | 5,100<br>0     |
| PNR | MORA | Inventory of Streams and Development of a Long-term Monitoring Program | Samora, Ms. B. A.<br>National Park Service<br>Mount Rainier National Park<br>Longmire, WA<br>98397 Phone: (206)569-2211                              | 75     | 11/89 | 1,200<br>0     |
| PNR | MORA | Elk Monitoring   | Schlegel, Mr. S. E.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 0      | 00/99 | 0<br>1,000     |
| PNR | MORA | Spotted Owl Survey   | Schlegel, Mr. S. E.<br>National Park Service<br>Mount Rainier National Park<br>Tahoma Woods, Star Route<br>Ashford, WA<br>98304 Phone: (206)569-2211 | 0      | 00/99 | 3,500<br>0     |
| PNR | MORA | Plant Response to Elk Grazing in Subalpine Meadows                     | Sharrow, Mr. S. H.<br>Oregon State University<br>Department of Rangeland Resources<br>Corvallis, OR<br>97331 Phone: (503)737-3341                    | 100    | 06/89 | 5,700<br>4,000 |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| PNR | MORA | Field Survey for the Occurrence of Obscure Indian Paintbrush                        | Sheehan, Mr. M.<br>Washington Natural Heritage Program<br>Div. of Land & Water Conservation<br>Mail Stop EX-13<br>Olympia, WA<br>98504 Phone: (206)753-2448   | 50     | 03/90 | 0<br>6,375    |
| PNR | MORA | Herpetofauna  | Snyder, Mr. R.<br>University of Washington<br>Department of Zoology, NJ-15<br>Seattle, WA<br>98195 Phone:   | 0      | 00/99 | 0<br>1,000    |
| PNR | MORA | Influence of Adjacent Land-use Practices on Elk of Pacific Northwest National Parks | Starkey, Mr. E.<br>NPS-Coop. Park Studies Unit<br>Oregon State University<br>Department of Resource Recreation<br>Corvallis, OR<br>97331 Phone: (503)737-2056 | 95     | 03/90 | 0<br>0        |
| PNR | MORA | Genetic Variation in Natural Populations of Black Cottonwood                        | Stettler, Mr. R.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2723                               | 85     | 06/90 | 0<br>12,000   |
| PNR | MORA | Forest Development and its Pollen Record Following Fires                            | Sugita, Mr. S.<br>University of Washington<br>Quaternary Research Center, AK-60<br>Seattle, WA<br>98195 Phone: (206)542-4571                                  | 95     | 06/90 | 0<br>0        |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| PNR | MORA | Investigation of the Genus Isoetes  | Taylor, Mr. W. C.<br>Milwaukee Public Museum<br>800 West Wells Street<br>Milwaukee, WI<br>53233 Phone: (414)278-2760                      | 50     | 07/90 | 0<br>500      |
| PNR | MORA | Outburst Floods   | Walder, Mr. J.<br>U.S. Geological Survey, W.R.D.<br>Cascades Volcano Observatory<br>5400 MacArthur Blvd.<br>Vancouver, WA<br>98661 Phone: | 20     | 09/92 | 0<br>40,000   |
| PNR | MORA | International Paleoclimate Program, Pliocene Climate Study  | Wolfe, Mr. J. A.<br>U.S. Geological Survey<br>Box 25046, MS 919<br>Denver Federal Center<br>Denver, CO<br>80225-0046 Phone:               | 0      | 09/94 | 0<br>19,000   |
| PNR | MORA | Development of a Computerized Resource Database   | Wright, Mr. G.<br>NPS-Coop. Park Studies Unit<br>University of Idaho<br>College of Forestry<br>Moscow, ID<br>83843 Phone: (208)885-7990   | 100    | 09/89 | 20,000<br>0   |
| PNR | MULT | The Pacific Northwest Outdoor Recreation Study: Three-State Recreation Consumption Survey Project | Brown, Mr. P. J.<br>Oregon State University<br>Department of Forest Resources<br>Corvallis, OR<br>97331 Phone: (503)737-2056              | 0      | 00/99 | 0<br>0        |

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| Reg | Park | Project Title                                       | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| PNR | MULT | Fire Effects on Red Heather                         | Potash, Ms. L.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2688              | 100    | 04/89 | 10,000<br>0  |
| PNR | NEPE | Grasses and Forbs at the Whitebird<br>Battleground. | Northam, Mr. F. E.<br>University of Idaho<br>Dept. of Plant, Soil & Ento. Sci.<br>Moscow, ID<br>83843 Phone: (208)885-7831                 | 50     | 11/92 | 0<br>5,000   |
| PNR | NEPE | Revegetation Experiments on the Spalding<br>Site    | Wright, Mr. R. G.<br>NPS-Coop. Park Studies Unit<br>University of Idaho<br>College of Forestry<br>Moscow, ID<br>83843 Phone: (206)885-7990 | 20     | 00/99 | 2,000<br>0   |
| PNR | NOCA | Subalpine Fire Dynamics                             | Agee, Mr. J. K.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2688             | 95     | 04/90 | 5,000<br>0   |
| PNR | NOCA | Grizzly Bear Investigations                         | Almack, Mr. J.<br>Washington Department of Wildlife<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700                  | 80     | 12/91 | 0<br>74,000  |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| PNR | NOCA | Mushrooms and Related Ectomycorrhizal Fungi                             | Armirati, Mr. J. F.<br>University of Washington<br>Department of Biology KB-15<br>Seattle, WA<br>98196 Phone: (206)543-1942                         | 0      | 00/99 | 0<br>500       |
| PNR | NOCA | Raptor Studies  | Bjorklund, Mr. J. E.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700 | 0      | 00/99 | 25,000<br>0    |
| PNR | NOCA | Status of Gray Wolves in the North Cascades                             | Bjorklund, Mr. J. E.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700 | 0      | 00/99 | 1,000<br>1,000 |
| PNR | NOCA | Orogenic Mechanisms in the Crystalline Core of the North Cascades       | Brown, Mr. E. H.<br>Western Washington University<br>Department of Geology<br>Bellingham, WA<br>98225 Phone: (206)676-3645                          | 0      | 06/91 | 0<br>50,000    |
| PNR | NOCA | Effects of Stocking Fish Into High-Mountain Lakes: Human Use Assessment | Brown, Mr. P. J.<br>Oregon State University<br>Department of Forest Resources<br>Corvallis, OR<br>97331 Phone: (503)737-2056                        | 0      | 00/99 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$  |
|-----|------|--|---|--------|-------|-----------------|
| PNR | NOCA | Coupling Paleoclimate and Paleofire at Desolation Peak                                   | Heyerdahl, Ms. E. K.<br>U.S. Forest Service<br>PNW Research Station<br>4043 Roosevelt Way NE<br>Seattle, WA<br>98105 Phone: (206)442-7815                           | 35     | 12/90 | 0<br>34,700     |
| PNR | NOCA | Assessment of Impacts Resulting from Human Recreational Use of High Lake Environments    | Hospodarsky, Mr. D.<br>Oregon State University<br>College of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-1497  | 35     | 10/91 | 26,000<br>7,020 |
| PNR | NOCA | Gypsy Moth Trapping  | Koro, Ms. B.<br>B.C. Ministry of Forests<br>Chilliwack Forest District<br>9850 S. McGrath Rd., P.O. Box 159<br>Rosedale, B.C.Canada<br>VOX 1X0 Phone: (604)794-3361 | 100    | 10/89 | 0<br>200        |
| PNR | NOCA | Bird Population Studies: Breeding Bird Survey; Breeding Bird Atlas; Christmas Bird Count | Kuntz II, Mr. R. C.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700                  | 0      | 00/99 | 750<br>400      |
| PNR | NOCA | Effects of Stocked Fish on High Mountain Lake Communities                                | Liss, Mr. W. J.<br>Oregon State University<br>Dept. of Fisheries and Wildlife<br>Corvallis, OR<br>97331 Phone: (503)737-4531  | 33     | 03/91 | 245,000<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| PNR | NOCA | Effects of Stocking Fish Into High-Mountain Lakes In North Cascades National Park Service Complex | Liss, Mr. W. J.<br>Oregon State University<br>Dept. of Fisheries and Wildlife<br>Corvallis, OR<br>97331 Phone: (503)737-4153                                | 0      | 00/99 | 0<br>0        |
| PNR | NOCA | Climate Survey Using Phenological Observations  | Mason, Mr. G. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 100    | 09/89 | 15<br>100     |
| PNR | NOCA | Atmospheric Deposition Monitoring   | Mason, Mr. G. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 100    | 12/31 | 1,800<br>0    |
| PNR | NOCA | Skagit River Bald Eagle Perch Tree Habitat Assessment   | Mason, Mr. G. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 85     | 05/90 | 250<br>0      |
| PNR | NOCA | Annual Midwinter Bald Eagle Survey  | Mason, Mr. G. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 100    | 01/89 | 100<br>0      |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| PNR | NOCA | Visitor Center Archeological Project   | Mierendorf, Mr. R. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 90     | 12/91 | 20,000<br>0     |
| PNR | NOCA | Desolation Chert Quarry Archeological Project  | Mierendorf, Mr. R. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4590 | 95     | 06/90 | 0<br>7,200      |
| PNR | NOCA | Ross Lake Archeological Project  | Mierendorf, Mr. R. R.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98276 Phone: (206)873-4590 | 20     | 12/93 | 0<br>100,000    |
| PNR | NOCA | Vascular Plants  | Naas, Ms. D.<br>VIP,(North Cascades National Park)<br>1078 East Pioneer Way, No. 4<br>Oak Harbor, WA<br>98277 Phone: (206)675-2180                               | 0      | 00/99 | 1,600<br>32,074 |
| PNR | NOCA | Effects of Recreational Horse Grazing in Altering Subalpine Meadow Plant Composition | Oelfke, Mr. J.<br>National Park Service<br>North Cascades National Park<br>P.O. Box 7<br>Stehekin, WA<br>98284 Phone: (509)682-4404                              | 0      | 00/99 | 1,500<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| PNR | NOCA | Use of Biological Control Agents for Diffuse Knapweed  | Oelfke, Mr. J.<br>National Park Service<br>North Cascades National Park<br>P.O. Box 7<br>Stehekin, WA<br>98852 Phone: (509)682-4404 | 25     | 00/99 | 120<br>100   |
| PNR | NOCA | Lake Chelan Spawning Ground Surveys                    | Peven, Mr. C. M.<br>Chelan Co. Public Utility District<br>P.O. Box 1231<br>Wenatchee, WA<br>98807 Phone: (509)663-8121              | 100    | 11/89 | 0<br>8,000   |
| PNR | NOCA | Resident Fisheries; Ross, Diablo, and Gorge Lakes      | Pflug, Mr. D.<br>Seattle City Light, E.A. Division<br>1015 Third Avenue<br>Seattle, WA<br>98104 Phone: (206)684-3692                | 100    | 10/89 | 0<br>110,000 |
| PNR | NOCA | Skagit River Gorge Bypass Reach Fishery Investigations | Pflug, Mr. D.<br>Seattle City Light, E.A. Division<br>1015 Third Avenue<br>Seattle, WA<br>98104 Phone: (206)684-3692                | 100    | 10/89 | 0<br>68,000  |
| PNR | NOCA | Fire Effects On Red Heather                            | Potash, Ms. L.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2688       | 100    | 04/89 | 10,000<br>0  |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| PNR | NOCA | Seattle City Light's Skagit River<br>Hydroelectric Project Erosion Control Plan               | Riedel, Mr. J. L.<br>National Park Service<br>North Cascades NP, Skagit District<br>728 Ranger Station Road<br>Marblemount, WA<br>98267 Phone: (206)873-4500 | 75     | 02/90 | 0<br>35,000  |
| PNR | NOCA | Elemental evaluation of firs, lichens and<br>soils in NOCA as indicators of air<br>pollution. | Stolte, Mr. K. W.<br>NPS-Air Quality Division<br>P.O. Box 25287<br>Lakewood, CO<br>80225 Phone: (303)969-2073  | 75     | 10/91 | 24,000<br>0  |
| PNR | NOCA | Mt. Baker Quadrangle  | Tabor, Mr. R. W.<br>U.S. Geological Survey<br>345 Middlefield Road<br>Menlo Park, CA<br>94025 Phone: (415)329-4912   | 40     | 12/92 | 0<br>76,000  |
| PNR | NOCA | Rare Plants In The Skagit Hydroelectric<br>Project Area                                       | Vanbianchi, Mr. R.<br>Dames & Moore<br>2025 1st Avenue<br>Seattle, WA<br>98121 Phone: (206)728-0744  | 100    | 09/89 | 0<br>28,000  |
| PNR | NOCA | Precipitation Monitoring at Seven Sites   | Wasem, Mr. C. R.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700              | 80     | 00/99 | 3,200<br>0   |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| PNR | NOCA | High Mountain Lake Ecology   | Wasem, Mr. C. R.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700      | 90     | 12/90 | 2,800<br>0    |
| PNR | NOCA | Physical, Chemical and Bacteriological Water Quality                                 | Wasem, Mr. C. R.<br>National Park Service<br>North Cascades National Park<br>2105 Highway 20<br>Sedro-Woolley, WA<br>98284 Phone: (206)856-5700      | 90     | 00/99 | 5,200<br>0    |
| PNR | NOCA | Petrogenesis of the Skagit Gneiss Migmatites, North Cascades, Washington             | Whitney, Ms. D. L.<br>University of Washington<br>Dept. of Geological Sciences, AJ-20<br>Seattle, WA<br>98195 Phone: (206)543-1996                   | 80     | 12/90 | 0<br>700      |
| PNR | NOCA | Development of a Geographic Information System for the Lower Stehekin River Drainage | Wright, Mr. G.<br>NPS-Coop. Park Studies Unit<br>University of Idaho<br>College of Forestry<br>Moscow, ID<br>83843 Phone: (208)885-7990              | 15     | 03/91 | 32,000<br>0   |
| PNR | OLYM | Salmon Outmigration, Elwha River   | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 03/90 | 0<br>16,000   |

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| Reg | Park | Project Title                     | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|-----------------------------------|--|--------|-------|--------------|
| PNR | OLYM | Boulder Removal, Elwha River      | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 11/90 | 0<br>7,000   |
| PNR | OLYM | Elwha River Smolt Emigration      | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 00/99 | 0<br>6,000   |
| PNR | OLYM | Water Quality, Elwha Dams Project | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 00/99 | 0<br>8,000   |
| PNR | OLYM | Elwha Dam Removal                 | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 02/90 | 0<br>60,000  |
| PNR | OLYM | Bald Eagle Survey                 | Hosey & Associates Engineering Co.<br>Northup West Office Park, Suite 190<br>2820 Northup Way, C-96900<br>Bellevue, WA<br>98004 Phone: (206)827-8661 | 0      | 05/90 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| PNR | OLYM | Fire Effects on Red Heather                                       | Agee, Mr. J. K.<br>University of Washington<br>College of Forest Resources, AR-10<br>Division of Resources Management<br>Seattle, WA<br>98195 Phone: (206)543-2688 | 100    | 04/89 | 10,000<br>0  |
| PNR | OLYM | Silicoflagellates in Near-Shore Surface Waters of Washington      | Armato, Mr. P. J.<br>Western Washington University<br>Department of Ecology<br>Bellingham, Washington 98225<br>Bellingham, WA<br>98225 Phone: (206)676-5926        | 25     | 12/90 | 0<br>4,070   |
| PNR | OLYM | Vegetational History of the Pleistocene in the Kalaloch Area      | Benham, Mr. S. R.<br>Pacific Lutheran University<br>Department of Earth Sciences<br>Tacoma, WA<br>98447 Phone: ( ) -   | 5      | 12/93 | 0<br>500     |
| PNR | OLYM | Nurse Log Tree Germination: Grazing Pressure on Seedling survival | Boersma, Ms. D.<br>University of Washington<br>Institute for Environmental Studies<br>Seattle, WA<br>98195 Phone: (206)543-1812                                    | 70     | 03/91 | 0<br>1,000   |
| PNR | OLYM | Genetic and Cytogenetic Studies of Gene Transfer in Solanum       | Brown, Mr. C. R.<br>UDA/ARS/ Research Geneticists<br>Route 2, Box 2953A<br>Prosser, WA<br>99350 Phone: (000)000-0000   | 90     | 01/90 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$  |
|-----|------|---|--|--------|-------|-----------------|
| PNR | OLYM | Peregrine Falcon Monitoring and Evaluation of Potential Nest Cliffs       | Buchanan, Mr. J. B.<br>Cascadia Research Collective<br>218 1/2 W. 4th Avenue<br>Olympia, WA<br>98501 Phone: (206)943-7325                                      | 100    | 07/89 | 0<br>5,000      |
| PNR | OLYM | Survey of Intertidal Communities  | Dethier, Mr. M. N.<br>University of Washington<br>Friday Harbor Laboratory<br>Friday Harbor, WA<br>98250 Phone: (206)378-2165                                  | 60     | 11/90 | 3,000<br>55,000 |
| PNR | OLYM | Timing and Exit Selection of Juvenile Chinook Salmon at Glines Canyon Dam | Dilley, Mr. S.<br>U.S. Fish and Wildlife Service<br>Fisheries Assistance Office<br>2625 Parkmont Lane, Building A<br>Olympia, WA<br>98502 Phone: (206)753-9460 | 50     | 07/90 | 0<br>0          |
| PNR | OLYM | NADP/NTN Atmospheric Deposition Monitoring Program                        | Gibson, Mr. J. H.<br>Colorado State University<br>Natural Resource Ecology Laboratory<br>Fort Collins, CO<br>80523 Phone: (303)491-1978                        | 0      | 00/99 | 4,000<br>0      |
| PNR | OLYM | Ecological Spatial Potential in the Port Angeles - Hurricane Ridge Area   | Glawion, Mr. R. M.<br>Ruhr-Universitat Bochum<br>Geographisches Institut<br>Postfach 10 21 48 4630<br>Bochum, Germany<br>Phone: (234)700-3381                  | 90     | 06/90 | 0<br>0          |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | WPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| PNR | OLYM | Reproductive Biology of Red Crossbills                                 | Hahn, Mr. T. P.<br>University of Washington<br>Department of Zoology, WJ-15<br>Seattle, WA<br>98195 Phone: (206)543-7623                            | 80     | 06/91 | 0<br>1,400      |
| PNR | OLYM | Ambient Fisheries Habitat Monitoring                                   | Hatten, Mr. J.<br>Hoh Tribe/Center for Streamside Stud<br>HC 80, BOX 917<br>Forks, WA<br>98331 Phone: (206)543-3507                                 | 50     | 12/99 | 0<br>1,500      |
| PNR | OLYM | Root Frost Hardiness of Four Subalpine Conifers                        | Hinckley, Mr. T.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-1588                     | 95     | 12/89 | 0<br>20,000     |
| PNR | OLYM | Pilot Study of Radio-tagging Queets River Spring-summer Chinook Salmon | Hiss, Mr. J.<br>U.S. Fish and Wildlife Service<br>Fisheries Assistance Office<br>2625 Parkmont Lane #A<br>Olympia, WA<br>98502 Phone: (206)753-9460 | 100    | 10/89 | 7,000<br>14,000 |
| PNR | OLYM | Elk Herbivory  | Houston, Mr. D. B.<br>National Park Service<br>Olympic National Park<br>600 East Park Avenue<br>Port Angeles, WA<br>98362 Phone: (206)452-4501      | 90     | 12/90 | 20,000<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| PNR | OLYM | Ecology and Management of Mountain Goats   | Houston, Mr. D. B.<br>National Park Service<br>Olympic National Park<br>600 East Park Avenue<br>Port Angeles, WA<br>98362 Phone: (206)452-4501               | 90     | 06/92 | 15,000<br>0  |
| PNR | OLYM | Taft Creek Ground Water Study, Hoh River Valley                                  | Inglis, Mr. R.<br>NPS - Water Resource Division<br>Federal Building, Room 343<br>301 S. Howes Street<br>Fort Collins, CO<br>80521 Phone: (303)221-8331       | 0      | 00/99 | 0<br>0       |
| PNR | OLYM | Annual Assessment of Sea Otters  | Jeffries, Mr. S.<br>Washington Department of Wildlife<br>Marine Mammal Investigations<br>7801 Phillips Rd. SW<br>Tacoma, WA<br>98498 Phone: (206)964-7278    | 60     | 07/95 | 0<br>8,000   |
| PNR | OLYM | Lake and Reservoir Water Quality Assessment                                      | Johnson, Mr. A.<br>Washington Department of Ecology<br>7171 Cleanwater Lane, LH-14<br>Olympia, Washington 98504<br>Olympia, WA<br>98504 Phone: (206)586-6828 | 60     | 02/90 | 0<br>5,200   |
| PNR | OLYM | Evaluation and Monitoring of Small Mammal Populations and Habitat Relationships. | Johnson, Mr. M. L.<br>University of Washington<br>Burke Memorial Museum, DB-10<br>Seattle, WA<br>98195 Phone: (206)545-7417                                  | 0      | 00/99 | 0<br>8,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| PNR | OLYM | Reference Collection of Common Mosses,<br>Lichens and Liverworts   | Kaltenthuler, Mr. B.<br>HC-80, Box 650<br>Forks, WA<br>98331 Phone: (206)374-6925  | 0      | 10/89 | 0<br>0        |
| PNR | OLYM | Seed Dormancy in High-elevation Plants of<br>the Olympic Mountains | Kaye, Mr. T. W.<br>Oregon State University<br>Dept. of Botany and Plant Pathology<br>Corvallis, OR<br>97331 Phone: (503)737-4351   | 99     | 02/90 | 0<br>300      |
| PNR | OLYM | Autecology, Reproductive Ecology, and<br>Demography of Astragalus  | Kaye, Mr. T. W.<br>Oregon State University<br>Dept. of Botany and Plant Pathology<br>Corvallis, OR<br>97331 Phone: (503)737-4351   | 100    | 12/89 | 6,000<br>0    |
| PNR | OLYM | Wetland and Rare Plant Inventory                                   | Kunze, Ms. L.<br>Washington Natural Heritage Program<br>Div. of Land & Water Conservation<br>Dept. of Nat. Resources, M/S EX-13<br>Olympia, WA<br>98504 Phone: (206)753-2449 | 75     | 07/90 | 0<br>3,080    |
| PNR | OLYM | High Mountain Lake Survey Olympic National<br>Park                 | Larson, Mr. G.<br>Oregon State University<br>National Park Service - CPSU<br>School of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-1498                               | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| PNR | OLYM | Water Resources                                       | Larson, Mr. G. L.<br>Oregon State University<br>National Park Service - CPSU<br>School of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-2043  | 80     | 12/89 | 3,000<br>0    |
| PNR | OLYM | Washington State Geologic Map - Northwest<br>Quadrant | Lingley, Mr. W. S.<br>Department of Natural Resources<br>Div. of Geology & Earth Sciences<br>MS:PY-12<br>Olympia, WA<br>98504 Phone: (206)753-2449 | 15     | 09/92 | 0<br>23,000   |
| PNR | OLYM | Visibility Monitoring and Data Analysis<br>Project    | Malm, Mr. W.<br>NPS-Air Quality Division<br>CIRA-Foothills Campus<br>Fort Collins, CO<br>80523 Phone: (303)491-8292                                | 60     | 00/99 | 0<br>0        |
| PNR | OLYM | Visibility Monitoring                                 | Malm, Mr. W. C.<br>NPS Air Quality Division<br>1901 Sharpe Point Drive, Suite E<br>Fort Collins, CO<br>80525 Phone: (303)224-9300                  | 0      | 00/90 | 7,500<br>0    |
| PNR | OLYM | Spotted Owl Inventory                                 | Moorhead, Mr. B. B.<br>National Park Service<br>Olympic National Park<br>600 East Park Avenue<br>Port Angeles, WA<br>98362 Phone: (206)452-4501    | 25     | 12/92 | 35,000<br>0   |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| PNR | OLYM | Inventory and Monitor Bald Eagles and Peregrine Falcons                        | Moorhead, Mr. B. B.<br>National Park Service<br>Olympic National Park<br>600 East Park Avenue<br>Port Angeles, WA<br>98362 Phone: (206)452-4501 | 40     | 04/95 | 500<br>3,000 |
| PNR | OLYM | Relations Between Geomorphology, Beaver Activities, and Salmonid Production    | Naiman, Mr. R.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-6920                   | 0      | 00/99 | 0<br>0       |
| PNR | OLYM | Coupled Structural and Fluid Evolution of the Neocene Hoh Accretionary Complex | Orange, Mr. D.<br>University of California Santa Cruz<br>Earth Science Board<br>Santa Cruz, CA<br>95064 Phone: (408)459-2574                    | 85     | 06/90 | 0<br>5,000   |
| PNR | OLYM | Biology of the Moth Genus Greya and Leafmining Lepidoptera                     | Pellmyr, Mr. D.<br>Dept. of Ecology and Evolution<br>SUNY<br>Stony Brook, NY<br>11742 Phone: (516)632-8639                                      | 50     | 08/91 | 0<br>1,000   |
| PNR | OLYM | Subalpine Fire Dynamics  | Potash, Ms. L.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2688                   | 95     | 04/89 | 5,000<br>0   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| PNR | OLYM | Layperson's Herbarium Specimens, Hurricane Ridge                     | Simmons, Mr. J. K.<br>1442 Kewalo Street, #207<br>Honolulu, HI<br>96822 Phone: (808)842-8264  | 75     | 09/89 | 250<br>0      |
| PNR | OLYM | Collection of Clinocerine Diptera (Flies) from Western North America | Sinclair, Mr. B.<br>Carleton University<br>Department of Biology<br>Ottawa, Ontario, Canada<br>K1S 5B6 Phone: (613)788-3872                       | 100    | 07/89 | 0<br>1,000    |
| PNR | OLYM | Forage Quality In Old-Growth Forests                                 | Starkey, Mr. E. E.<br>NPS-Coop. Park Studies Unit<br>Oregon State University<br>School of Forestry<br>Corvallis, OR<br>97331 Phone: (503)737-2056 | 0      | 00/99 | 0<br>0        |
| PNR | OLYM | Myxomycetes  | Stephenson, Mr. S. L.<br>Fairmont State College<br>Fairmont, WV<br>26554 Phone: (304)366-9224   | 10     | 10/92 | 0<br>150      |
| PNR | OLYM | Genetic Variations in Natural Populations of Black Cottonwood        | Stettler, Mr. R.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2723                   | 85     | 06/90 | 0<br>12,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| PNR | OLYM | Cytological and Electrophoretic Study of Isoetes From Lake Crescent and Lake Ozette            | Taylor, Mr. W. C.<br>Milwaukee Public Museum<br>Botany Section<br>800 West Wells Street<br>Milwaukee, WI<br>53233 Phone: (414)278-2760                         | 50     | 07/90 | 0<br>500      |
| PNR | OLYM | Precipitation Chemistry and Ecosystem Function: Baseline Research for Acid Deposition Studies. | Thomas, Mr. T. B.<br>University of Washington<br>College of Forest Resources, AR-10<br>Seattle, WA<br>98195 Phone: (206)543-2818                               | 60     | 12/90 | 88,000<br>0   |
| PNR | OLYM | Evaluation of Effects of Outplanting Hatchery Coho Fry in Four Tributaries of the Queets River | Wampler, Mr. P.<br>U.S. Fish and Wildlife Service<br>Fisheries Assistance Office<br>2625 Parkmont Lane Building A<br>Olympia, WA<br>98502 Phone: (206)753-9460 | 100    | 10/89 | 0<br>35,000   |
| PNR | OLYM | Distribution, Age, and Geomorphic Character of Rock Glaciers in the Olympic Mountains          | Welter, Mr. S.<br>University of Colorado<br>Department of Geography<br>Boulder, CO<br>80309 Phone: (303)492-4481   | 100    | 00/99 | 0<br>0        |
| PNR | OLYM | Pinewood Nematode Survey   | Williams, Mr. D. J.<br>Washington State Dept/Agriculture<br>Plant Services Division<br>1313 W. Meeker, Suite 111<br>Kent, WA<br>98032 Phone: (206)872-6480     | 100    | 10/89 | 0<br>2,520    |

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| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| PNR | OLYM | Timing, Exit Selection, and Survival of Steelhead and Coho Smolts at Glines Dam, Elwha River | Wunderlich, Mr. R.<br>U.S. Fish & Wildlife Service<br>Fisheries Assistance Office<br>2625 Parkmont Lane, Building A<br>Olympia, WA<br>98502 Phone: (206)753-9460    | 100    | 01/89 | 0<br>5,000    |
| PNR | ORCA | Fire and Forest History at the Oregon Caves  | Agee, Mr. J. K.<br>University of Washington<br>Division of Resources Management<br>College of Forest Resources (AR-10)<br>Seattle, WA<br>98195 Phone: (206)543-2688 | 80     | 04/90 | 10,000<br>0   |
| PNR | ORCA | Water Quality Monitoring in Oregon Caves   | Aley, Mr. T.<br>Ozark Underground Laboratory<br>Route 1 Box 62<br>Protem, MO<br>65733 Phone: (417)785-4289  | 50     | 00/99 | 3,000<br>0    |
| PNR | ORCA | Historic American Building Survey  | Klent, Mr. K.<br>4408 Huntington Way<br>Independence, MO<br>64055 Phone:  | 75     | 09/90 | 30,000<br>0   |
| PNR | ORCA | Bat Access Monitoring  | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100                | 50     | 10/90 | 100<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| PNR | ORCA | Exotic Plant Monitoring in Oregon Caves National Monument | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100 | 35     | 10/91 | 100<br>0     |
| PNR | ORCA | Cave Climate Monitoring at Oregon Cave                    | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100 | 20     | 05/91 | 3,000<br>0   |
| PNR | ORCA | Geologic Mapping of Oregon Caves National Monument        | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100 | 30     | 09/90 | 200<br>0     |
| PNR | ORCA | Surface Pest Plant Monitoring at Oregon Caves             | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100 | 30     | 06/97 | 200<br>0     |

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| Reg | Park | Project Title                       | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|-------------------------------------|--|--------|-------|----------------|
| PNR | ORCA | Vascular Plant Collecting           | Roth, Mr. J. E.<br>National Park Service<br>Oregon Caves National Monument<br>19000 Caves Highway<br>Cave Junction, OR<br>97523 Phone: (503)592-2100 | 30     | 10/91 | 100<br>0       |
| PNR | SAJH | Structural Geology of Thrust Vaults | Cowan, Mr. D. S.<br>University of Washington<br>Department of Geological Science<br>Seattle, WA<br>98195 Phone: (206)543-4033                        | 40     | 12/91 | 0<br>750       |
| PNR | WHMI | Revegetation                        | Larson, Mr. L.<br>Eastern Oregon State College<br>OSU Agriculture Program<br>La Grande, OR<br>97850 Phone: (503)963-1547                             | 70     | 11/91 | 4,000<br>9,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|--|--|--------|-------|----------------|
| RMR | ARCH | Interactions between <i>Fraxinus anomala</i> (single leaf ash) and <i>Tropidosteptes</i> sp. (Hemiptera: Miridae): the effect of auto exhaust and road dust on susceptibility to attack. | Graham, Dr. T.<br>Southeast Utah Group<br>National Park Service<br>125 W. 2nd S.<br>Moab, UT<br>84532 Phone: | 30     | 12/92 | 1,000<br>0     |
| RMR | ARCH | Effectiveness of the herbicide Garlon 3A on <i>Tamarix ramosissima</i> : the role of season of application in tamarisk mortality   | Graham, Dr. T.<br>Southeast Utah Group<br>National Park Service<br>125 W. 2nd S.<br>Moab, UT<br>84532 Phone: | 60     | 12/90 | 1,000<br>0     |
| RMR | ARCH | <i>Coleogyne Ramossissima</i> seedling establishment: the roles of substrate, proximity to mature blackbrush and number of seedlings in a clump on blackbrush seedling survival.         | Graham, Dr. T.<br>Southeast Utah Group<br>National Park Service<br>125 W. 2nd S.<br>Moab, UT<br>84532 Phone: | 60     | 12/90 | 1,000<br>0     |
| RMR | ARCH | Ecology of potholes on the Colorado Plateau: effect of acid deposition on rock pool communities in and near Arches N.P., Utah  | Graham, Dr. T.<br>Southeast Utah Group<br>National Park Service<br>125 W. 2nd S.<br>Moab, UT<br>84532 Phone: | 40     | 12/91 | 16,000<br>0    |
| RMR | ARCH | Preliminary Accessment of Bison Alcove, Arches National Park   | Mead, J. I.<br>Northern Arizona University<br>Flagstaff, AZ  | 50     | 04/90 | 5,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| RMR | ARCH | An investigation of the Jurassic J-2 Erosional Surface of the Western Interior of the United States- Conditions of Formation and Implications for Basin Tectonics. | Swezey, Mr. C. S.<br>University of Texas<br>Austin, TX  | 70     | 01/90 | 0<br>10,000     |
| RMR | BADL | Bighorn Sheep Population Size, Dynamics, Distribution and Herd Health  | Benzon, Mr. T.<br>S.D. Dept. of Game, Fish, and Parks<br>Wildlife Division<br>3305 W. South Street<br>Rapid City, SD<br>57702 Phone:        | 80     | 11/90 | 2,000<br>25,000 |
| RMR | BADL | Genetic and Reproductive Consequences of Polygyny In Isolated Populations  | Berger, Dr. J.<br>University of Nevada - Reno<br>Dept. of Range, Wildlife, & Forest<br>1000 Valley Road<br>Reno, NV<br>89512 Phone:         | 100    | 10/89 | 0<br>0          |
| RMR | BADL | Fossil vertebrates from four superposed channel sandstones in Palmer Creek   | Bjork, Dr. P.<br>Museum of Geology<br>South Dakota Sch. of Mines & Tech.<br>501 E. St. Joseph Street<br>Rapid City, SD<br>57701-3995 Phone: | 0      | 00/99 | 0<br>3,000      |
| RMR | BADL | Determine differences in the Paleofauna of Geographically and temporally separated areas of the Oligocene  | Davis, Mr. R. C.<br>University of Utah Campus<br>Utah Museum of Natural History<br>Salt Lake City, UT<br>84112 Phone:                       | 25     | 01/93 | 2,200<br>0      |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| RMR | BADL | Evaluation of The Nature of Sedimentation and Fossil Entombment in Oligocene age sediments | Guensburg, Dr. T. E.<br>Southern Illinois University<br>Dept. of Geography & Earth Science<br>Campus Box 1459<br>Edwardsville, IL<br>62026 Phone:                              | 60     | 06/91 | 0<br>0       |
| RMR | BADL | Locomotor Adaptations in Oligocene Herbivores  | Hickerson, Mr. W.<br>Georgia College<br>Department of Biology<br>Milledgeville, GA<br>31061 Phone: (912)453-4062   | 70     | 05/90 | 0<br>3,000   |
| RMR | BADL | Fire Effects in wooded draws   | Hull-Sieg, Ms. C.<br>Rocky Mtn. Forest & Range Exper. St<br>South Dakota Sch. of Mines Campus<br>501 E. St. Joseph Street<br>Rapid City, SD<br>57701-9988 Phone: (605)394-1960 | 20     | 12/94 | 0<br>8,000   |
| RMR | BADL | Geologic Dating using Magnetic Stratigraphy  | Prothero, Dr. D. R.<br>Occidental College<br>Department of Geology<br>Los Angeles, CA<br>90041 Phone:  | 80     | 02/91 | 0<br>5,000   |
| RMR | BADL | Microvertebrates in a Chadronian Channel Deposit- Quinn Draw                               | Shikany, Mr. M.<br>Georgia College<br>Department of Biology<br>Milledgeville, GA<br>31061 Phone: (912)453-4062   | 15     | 00/99 | 0<br>3,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| RMR | BADL | Evolutionary Relationships and Biomechanics of Perissodactyl   | Wall, Dr. W. P.<br>Georgia College<br>Department of Biology<br>Milledgeville, GA<br>31061<br>Phone: (912)453-4062  | 30     | 05/92 | 0<br>3,000      |
| RMR | BADL | Baseline Survey - Lichens  | Will-Wolf, Dr. S.<br>University of Wisconsin<br>Department of Biology<br>124 Birge Hall<br>Madison, WI<br>53711<br>Phone: (608)262-6836                      | 25     | 00/99 | 0<br>1,000      |
| RMR | BICA | Fire History in the Bighorn Canyon National Recreation Area.   | Knight, Dr. D. H.<br>University of Wyoming<br>Laramie, WY<br>82071<br>Phone: (307)766-3291   | 60     | 08/90 | 14,000<br>2,000 |
| RMR | BICA | Riparian Vegetation Dynamics along the Bighorn River, Wyoming (last portion of the project entitled, "Composition, abundance and distribution of vascular plants in the Bighorn Canyon NRA") | Knight, Dr. D. H.<br>University of Wyoming<br>Department of Botany<br>Laramie, WY<br>82071<br>Phone:   | 100    | 12/89 | 0<br>7,000      |
| RMR | BICA | Cardiac Telemetry, Natalty and Genetics of a Recolonized Population of Bighorn Sheep   | Schemnitz, Dr. S. D.<br>New Mexico State University<br>Las Cruces, NM  | 75     | 00/99 | 0<br>21,000     |
| RMR | BLCA | Quantification of Federal reserved water rights  | Haas, Dr. G. E.<br>Colorado State University<br>Rec. Res. & Landscape Architecture<br>233 Forestry Bldg.<br>Ft. Collins, CO<br>80523<br>Phone: (303)491-5126 | 20     | 01/91 | 9,000<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$   |
|-----|------|---|---|--------|-------|----------------|
| RMR | BLCA | Quantification of Federal reserved water rights                                   | Pettee, Mr. C. W.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8321                               | 40     | 01/91 | 20,000<br>0    |
| RMR | BLCA | Quantification of Federal reserved water rights                                   | Scott, Dr. M. L.<br>U.S. Fish and Wildlife Service<br>National Ecology Research Center<br>4512 McMurray Avenue<br>Ft. Collins, CO<br>80525 Phone: (303)226-9475 | 10     | 01/91 | 18,000<br>0    |
| RMR | BLCA | Quantification of Federal reserved water rights                                   | Ward, Dr. J. V.<br>Colorado State University<br>Department of Biology<br>Ft. Collins, CO<br>80523 Phone: (303)491-5024  | 20     | 01/91 | 25,000<br>0    |
| RMR | BRCA | Effects of Air Pollution on Cryptogamic Crusts                                    | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164  | 90     | 11/90 | 20,000<br>0    |
| RMR | BRCA | Biological Surveys on Public Lands (NPS/FWS Interagency Agreement IA-1200-9-0002) | Bogan, Mr. M. A.<br>U.S. Fish & Wildlife Service<br>National Ecology Research Center<br>4512 McMurray Avenue<br>Fort Collins, CO<br>80525 Phone: (303)226-9463  | 40     | 12/93 | 5,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| RMR | BRCA | Structural Geology of Bryce National Park  | Davis, Dr. G. H.<br>University of Arizona<br>Room 605, Administration Building<br>Tucson, AZ<br>85721 Phone:   | 10     | 08/92 | 0<br>7,000     |
| RMR | BRCA | Stratigraphy and geologic history of<br>Cretaceous Rocks of the Paunsaugunt Plateau                        | Eaton, Mr. J. G.<br>Department of Geology<br>Museum of Northern Arizona<br>Flagstaff, AZ<br>86001 Phone:   | 20     | 09/93 | 0<br>4,000     |
| RMR | BRCA | Tectonstratigraphy of Late Cretaceous and<br>Paleogene nonmarine rocks of Southwest Utah                   | Goldstrand, Mr. P.<br>University of Nevada<br>Department of Geology<br>Reno, NV<br>89557 Phone: (702)747-4037  | 75     | 12/90 | 0<br>2,000     |
| RMR | BRCA | Stratigraphy, Sedimentology and Diagenesis<br>of the Paleogene Claron Formation, Southwest<br>Utah         | Mullett, Mr. D. J.<br>Kent State University<br>Department of Geology<br>Kent, OH<br>44242 Phone: (216)672-2041   | 95     | 05/91 | 0<br>8,000     |
| RMR | BRCA | Historical Vegetation, fuel loads and<br>integrated information systems for Bryce<br>Canyon National Park. | Roberts, Mr. D. W.<br>Utah State University<br>College of Natural Resources<br>Dept. of Forest Resources<br>Logan, UT<br>84322-5215 Phone: (801)750-2416 | 85     | 10/90 | 5,000<br>3,000 |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|---|--|--------|-------|----------------|
| RMR | BRCA | Plant Community Distribution and Dynamics in Bryce Canyon National Park.  | Roberts, Mr. D. W.<br>Utah State University<br>College of Natural Resources<br>Dept. of Forest Resources<br>Logan, UT<br>84322-5215 Phone: (801)750-2416 | 90     | 03/90 | 0<br>0         |
| RMR | BRCA | Analysis of community composition and Habitat of <i>Pediomelum Pariense</i> in Bryce Canyon National Park.                                      | Roberts, Mr. D. W.<br>Utah State University<br>College of Natural Resources<br>Dept. of Forest Resources<br>Logan, UT<br>84322-5215 Phone: (801)750-2416 | 90     | 03/90 | 1,000<br>1,000 |
| RMR | CANY | Effects of Air Pollution on Cryptogamic Crusts  | Belnap, Ms. J.<br>Canyonlands NP<br>125 West Second South<br>Moab, UT<br>84532 Phone: (801)259-7164  | 90     | 11/90 | 20,000<br>0    |
| RMR | CANY | Composition, distribution, relative abundance and habitat requirements of endangered, threatened and rare plant species in Canyonlands Complex. | Heil, Mr. K. D.<br>San Juan College  | 25     | 05/92 | 0<br>7,000     |
| RMR | CANY | Distribution of larval fishes in the Colorado River.  | McAda, Mr. C.<br>U.S. Fish and Wildlife Service<br>529 251/2 Rd., Suite B-110<br>Grand Junction, CO<br>81505 Phone:                                      | 25     | 07/92 | 0<br>10,000    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|---|--|--------|-------|----------------|
| RMR | CARE | Capitol Reef National Park Soil Survey  | Allgood, Dr. F. P.<br>U.S. Dept. of Agriculture<br>Soil Conservation Service<br>P.O. Box 11350<br>Salt Lake City, UT<br>84147 Phone:                       | 15     | 00/99 | 90,000<br>0    |
| RMR | CARE | Survey of aquatic macroinvertebrates in the Fremont River in Capitol Reef National Park | Baumann, Dr. R. W.<br>Department of Zoology<br>Brigham Young University<br>Provo, UT<br>84602 Phone: (801)378-5492   | 100    | 12/89 | 200<br>7,000   |
| RMR | CARE | Effects of Air Pollution on Cryptogamic Crusts  | Belnap, J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164   | 90     | 11/90 | 20,000<br>0    |
| RMR | CARE | Effects of Air Pollution on Cryptogamic Crusts  | Belnap, J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164   | 90     | 11/90 | 20,000<br>0    |
| RMR | CARE | Biological Surveys on Public Lands  | Bogan, M. A.<br>U.S. Fish & Wildlife Service<br>National Ecology Research Center<br>4512 McMurray Avenue<br>Fort Collins, CO<br>80525 Phone: (303)226-9463 | 20     | 12/93 | 5,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | WPS\$/Other\$    |
|-----|------|--|--|--------|-------|------------------|
| RMR | CARE | Survey of the Macroinvertebrate of the Fremont River   | Caprio, J. M.<br>Montana Agricultural Exp. Station   | 0      | 00/99 | 0<br>0           |
| RMR | CARE | Reconstruction of the Pre-settlement Grasslands, Utah  | Cole, K.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone:                      | 90     | 00/99 | 0<br>0           |
| RMR | CARE | Prehistorical Grasslands of Capitol Reef National Park   | Fisher, R. F.<br>Utah State University<br>Logan, UT<br>84322-5215 Phone: (801)750-2455   | 75     | 09/90 | 10,000<br>14,404 |
| RMR | CARE | Geometry and emplacement history of a basaltic intrusive complex San Rafael and Capitol Reef Areas, Utah | Gartner, A. E.<br>U.S. Geological Survey<br>MS-910<br>Menlo Park, CA<br>94025 Phone:   | 98     | 03/91 | 0<br>0           |
| RMR | CARE | The Ecology of Small Pools in CARE, Utah   | Haefner, Dr. J. W.<br>Utah State University<br>Logan, UT<br>84322 Phone:   | 60     | 00/99 | 0<br>0           |
| RMR | CARE | Fisheries Impact Analysis of the Proposed Fremont River Hydropower project                               | Hardy, Dr. T. B.<br>Dept. Civil & Env'tl. Engineering<br>Utah State University<br>Logan, UT<br>84322-4110 Phone: (801)750-2989 | 100    | 12/89 | 0<br>6,000       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | CARE | Map Vegetation Communities of Capitol Reef National Park   | Heil, K. D.<br>San Juan College<br>4601 College Blvd.<br>Farmington, NM<br>87401 Phone:   | 90     | 07/90 | 0<br>0        |
| RMR | CARE | Map Vegetation Communities of Capitol Reef National Park   | Heil, K. D.<br>San Juan College<br>4601 College Blvd.<br>Farmington, NM<br>87401 Phone:   | 90     | 07/90 | 0<br>0        |
| RMR | CARE | Relict Plant Community Survey of Colorado Plateau  | Holland, J.<br>Glen Canyon National Recre. Area<br>P.O. Box 1507<br>Page, AZ<br>86040 Phone:  | 25     | 00/99 | 0<br>0        |
| RMR | CARE | Trace fossils and paleoecology of the Torrey Member of the Moenkopi Formation, southeastern Utah | Lennartz, D.<br>University of Utah<br>Department of Geology & Geophysics<br>717 Browning Building<br>Salt Lake City, UT<br>84112 Phone: (000)451-5198 | 10     | 09/91 | 0<br>300      |
| RMR | CARE | A biogeographic analysis of the grasshoppers of the Great Basin                                  | MacMahon, Dr. J. A.<br>Department of Biology<br>Utah State University<br>Logan, UT<br>84322-5305 Phone: (801)750-2478                                 | 95     | 00/99 | 0<br>0        |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | CARE | A biogeographic analysis of the grasshoppers of the Great Basin                                    | MacMahon, Dr. J. A.<br>Utah State University<br>Department of Biology<br>Logan, UT<br>84322-5305 Phone: (801)750-2478 | 95     | 00/99 | 0<br>0        |
| RMR | CARE | Reconstruction of Sandy Fluvial Environments   | Mohrig, Mr. D. C.<br>University of Washington<br>Seattle, WA  | 10     | 00/99 | 0<br>0        |
| RMR | CARE | Stratigraphic Study of Lower Triassic Marine Rocks   | Paull, Dr. R. A.<br>University of Wisconsin   | 70     | 00/99 | 0<br>0        |
| RMR | CARE | Analysis of the Jurassic System on the Colorado Plateau  | Peterson, Dr. F.<br>U.S. Geological Survey  | 95     | 00/99 | 0<br>0        |
| RMR | CARE | Water Resources Assessment for CARE, Utah  | Rasmussen, T. C.<br>University of Arizona<br>College of Engineering & Mines<br>Tucson, AZ<br>85721 Phone:             | 60     | 00/99 | 0<br>0        |
| RMR | CARE | Macroinvertebrates and Chemistry of the Fremont River  | Reichert, Mr. M.<br>Bureau of Water Pollution Control   | 0      | 00/99 | 0<br>0        |
| RMR | CARE | Effects of livestock grazing on small mammal fauna and habitats, Capitol Reef National Park, Utah. | Rosenstock, S.<br>Wingate Eco-Logic<br>P.O. Box 462<br>Fredonia, AZ<br>86022 Phone: (602)643-7541                     | 35     | 08/91 | 10,000<br>0   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$    |
|-----|------|---|--|--------|-------|-------------------|
| RMR | CARE | Survey and Analysis of Relict Plant Communities Within National Park Service Units of the Colorado Plateau                          | Van Pelt, Dr. N.<br>Great Basin Field Office<br>The Nature Conservancy<br>P.O. Box 11486, Pioneer Station<br>Salt Lake City, UT<br>84147-0486 Phone: (801)531-0999 | 15     | 12/90 | 210,000<br>90,000 |
| RMR | CARE | Some responses of soil microphytic crust to livestock trampling   | West, Dr. N. E.<br>Utah State University<br>Department of Range Science<br>Logan, UT<br>84322-5230 Phone: (801)750-2572  | 20     | 07/94 | 0<br>45,000       |
| RMR | CARE | Response of Avian Communities to Livestock-induced Changes to Vegetation in Capital Reef National Park, Utah.                       | Willey, D. W.<br>High Desert Research<br>P.O. Box 136<br>Torrey, UT<br>84775 Phone: (801)425-3569  | 30     | 09/91 | 10,000<br>10,000  |
| RMR | CARE | Distribution and biology of Peregrine Falcons in Capitol Reef National Park and the Escalante and Dirty Devil River Corridors, Utah | Willey, D. W.<br>High Desert Research<br>P.O. Box 136<br>Torrey, UT<br>84775 Phone: (801)425-3569  | 30     | 08/91 | 5,000<br>4,000    |
| RMR | CARE | Ecology of Introduced Bighorn Sheep   | Workman, Dr. G. W.<br>Utah State University<br>Logan, UT<br>84322 Phone:   | 90     | 00/99 | 0<br>0            |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPSS/Other\$     |
|-----|------|--|---|--------|-------|------------------|
| RMR | CEBR | Plant Community and Rare of Exotic Species<br>Distribution and Dynamics in Cedar Breaks<br>National Monument | Roberts, Mr. D. W.<br>Utah State University<br>Dept. of Forest Resources & Ecology<br>Logan, UT<br>84322-5200 Phone:      | 55     | 06/90 | 14,000<br>10,000 |
| RMR | COLM | Bat species abundance and distribution at<br>Colorado National Monument Fruita, Colorado.                    | Adams, Mr. R. A.<br>University of Colorado<br>Dept. of EPO Biology<br>Boulder, CO<br>80309-0334 Phone: (303)492-8189      | 100    | 09/89 | 0<br>1,000       |
| RMR | COLM | Effects of air pollution on Cryptogamic<br>Crusts  | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164                              | 90     | 11/90 | 20,000<br>0      |
| RMR | COLM | Peregrine Falcon Monitoring  | Craig, Mr. J.<br>Colorado National Monument<br>Colorado Division of Wildlife<br>Fruita, CO<br>81521-0001 Phone:           | 0      | 00/99 | 4,000<br>0       |
| RMR | COLM | Guide to the Common Insects and Other<br>Arthropods of Colorado National Monument                            | Kondratieff, Mr. B. C.<br>Colorado State University<br>Department of Entomology<br>Fort Collins, CO<br>80523 Phone: ( ) - | 90     | 12/90 | 0<br>1,000       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
| RMR | COLM | Behavioral, Population, and Community Ecology of Iguanid Lizards.   | M'Closkey, Mr. R. T.<br>University of Windsor<br>Department of Biological Sciences<br>Windsor, Ontario<br>N9B 3P4 Phone:                                      | 10     | 00/95 | 0<br>30,000    |
| RMR | COLM | Baseline Air Quality Monitoring   | Taylor, Mr. J. D.<br>Colorado National Monument<br>Air Quality Division<br>Fruita, CO<br>81521-0001 Phone:  | 0      | 00/99 | 15,000<br>0    |
| RMR | COLM | Survey and Analysis of Relict Plant Communities within National Park Service Units of the Colorado Plateau.                   | Van Pelt, Dr. N. S.<br>Utah Public Lands Coordinator<br>P.O. Box 11486 Pioneer Station<br>Salt Lake City, UT<br>84147-0486 Phone: (801)531-0999               | 40     | 01/90 | 1,000<br>1,000 |
| RMR | CURE | Surface Water Quality Monitoring  | Stahlnecker, Mr. K.<br>National Park Service<br>Curecanti National Recreation Area<br>102 Elk Creek<br>Gunnison, CO<br>81230 Phone: (303)641-2337             | 0      | 00/99 | 3,000<br>0     |
| RMR | DETO | Changes in deciduous woodland plant communities in response to exclosure from deer browsing, Devil's Tower National Monument. | Jones, Mr. G. P.<br>Wyoming Natural Diversity Database<br>The Nature Conservancy<br>Box 3165, University Station<br>Laramie, WY<br>82071 Phone: (307)766-2720 | 50     | 01/90 | 2,000<br>0     |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| RMR | DETO | Vegetation Responses to Fire  | Marriott, Mr. H.<br>The Nature Conservancy<br>3165 University Station<br>Laramie, WY<br>82071 Phone: (307)766-2720   | 85     | 01/90 | 2,000<br>0      |
| RMR | DINO | Effects of Air Pollution on Cryptogamic Crusts  | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164   | 90     | 11/90 | 20,000<br>0     |
| RMR | DINO | Biological Surveys on Public Lands (NPS/FWS Interagency Agreement: IA-1200-9-0002)                | Bogan, Mr. M. A.<br>U.S. Fish & Wildlife Service<br>National Ecology Research Center<br>4512 McMurray Avenue<br>Fort Collins, CO<br>80525 Phone: (303)226-9463 | 65     | 12/93 | 5,000<br>5,000  |
| RMR | DINO | Radio - telemetered monitoring of stocked <i>Gila elegans</i> in the Green River, Utah.           | Chart, Mr. T. E.<br>Utah Division of Wildlife Resources<br>152 East 100 North<br>Vernal, UT<br>84078 Phone: (801)789-3103                                      | 85     | 04/89 | 0<br>63,000     |
| RMR | DINO | Inventory of Plant Species of Special Concern and The General Flora of Dinosaur National Monument | Naumann, Ms. T.<br>Colorado Natural Areas Program<br>1313 Sherman St., Room 618<br>Denver, CO<br>80203 Phone: (303)866-3047                                    | 80     | 04/90 | 14,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$ |
|-----|------|--|---|--------|-------|----------------|
| RMR | DINO | Gamefish/Endangered Fishes Interactions  | Nesler, Mr. T. P.<br>Colorado Division of Wildlife<br>317 West Prospect<br>Fort Collins, CO<br>80526 Phone: (303)484-2836                               | 60     | 12/91 | 0<br>85,000    |
| RMR | DINO | Early Tertiary Tectogenic<br>Sedimentation-North Flank of Uinta Mountains                | Tollestrup, Mr. A. K.<br>University of Wyoming<br>Department of Geology & Geophysics<br>P.O. Box 3006<br>Laramie, WY<br>82070 Phone: (307)766-3386      | 10     | 09/90 | 0<br>3,000     |
| RMR | DINO | Colorado River Fish Project  | Tyus, Mr. H.<br>U.S. Fish and Wildlife Service<br>Colorado River Fish Project<br>1680 W. Highway 40 Rm 1210<br>Vernal, UT<br>84078 Phone: (801)789-0354 | 0      | 00/99 | 0<br>0         |
| RMR | FOBU | Develop Mini Quarry  | Buchheim, Dr. P.<br>Loma Linda University<br>Department of Geological Sciences<br>Riverside, CA<br>92515 Phone:   | 100    | 08/89 | 0<br>0         |
| RMR | FOLA | Development of Flight Adaptations of the<br>Little Brown Bat ( <i>Myotis lucifugus</i> ) | Adams, Mr. R. A.<br>University of Colorado<br>Boulder, CO<br>80309 Phone:   | 50     | 00/99 | 0<br>2,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| RMR | FOLA | Growth and development of flight morphology in the little brown bat ( <i>Myotis lucifugus</i> ).                  | Adams, Mr. R. A.<br>University of Colorado<br>Department of EPO Biology<br>Boulder, CO<br>80309-0334 Phone:                                       | 100    | 09/89 | 0<br>2,000   |
| RMR | FOLA | Prairie Revegetation of Aquired Agricultural Inholdings (Holtzclaw Tract) at Fort Laramie National Historic Site. | Wylie, Mr. T.<br>National Park Service<br>12795 W. Alameda<br>P.O. Box 25287<br>Denver, CO<br>80225 Phone: (303)969-2650                          | 50     | 08/93 | 12,000<br>0  |
| RMR | GLAC | Portraying the physiography of Waterton/Glacier International Peace Park  | Alpha, Mr. T. R.<br>U.S. Geological Survey<br>Office of Publications<br>345 Middleford Road<br>Menlo Park, CA<br>94025 Phone: (415)329-5013       | 75     | 00/92 | 0<br>0       |
| RMR | GLAC | Genetic Structure of Trembling Aspen Populations  | Barnes, Dr. B. V.<br>University of Michigan<br>School of Natural Resources<br>Dana Bldg., 430 E. University<br>Ann Arbor, MI<br>48109-1115 Phone: | 75     | 09/89 | 0<br>16,000  |
| RMR | GLAC | Postglacial Vegetation and Climate of Glacier National Park   | Barnosky, Dr. C. W.<br>Carnegie Museum of Natural History<br>Section of Paleobotany<br>4400 Forbes Ave.<br>Pittsburg, PA<br>15213 Phone:          | 10     | 12/92 | 0<br>40,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| RMR | GLAC | Analysis of Potential Sensitive Mammal Species for Long-term Monitoring in Glacier National Park             | Beiswenger, R. E.<br>University of Wyoming<br>Dept. of Geography and Recreation<br>P.O. Box 3371<br>Laramie, WY<br>82071 Phone: (307)767-6424 | 50     | 04/90 | 6,085<br>10,782 |
| RMR | GLAC | Documentation and reconstruction of the Red Bench Fire event.  | Bushy, Mr. C.<br>University of Montana<br>Systems for Environmental Mgmt.<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)888-5441 | 0      | 00/90 | 11,970<br>0     |
| RMR | GLAC | Inventory and monitoring of biodiversity   | Debinski, Ms. D.<br>Montana State University<br>Biology Department<br>Bozeman, MT<br>59717 Phone: (406)994-2332                               | 75     | 12/89 | 15,000<br>1,000 |
| RMR | GLAC | Soil Inventory Demonstration Project   | Dutton, Mr. B.<br>Dutton Resource Consulting<br>P.O. Box 9272<br>Missoula, MT<br>59807 Phone:   | 25     | 06/90 | 4,000<br>0      |
| RMR | GLAC | Ecology and distribution of the northern bog lemming, <i>Synaptomys borealis</i> , in Glacier National Park. | Foresman, Ms. K. R.<br>University of Montana<br>Division of Biological Sciences<br>Missoula, MT<br>59812 Phone: (406)243-4492                 | 15     | 10/90 | 0<br>5          |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| RMR | GLAC | A biosystematic study of Rocky Mountain Draba (Cruciferae).   | Fox, Mr. L.<br>University of Idaho<br>Biological Sciences Department<br>Moscow, ID<br>83843 Phone: (406)888-5441                  | 0      | 00/90 | 0<br>0        |
| RMR | GLAC | Basic inventory of horse flies (Tabanidae) and associated spiroplasmas of Glacier National Park                                   | French, Mr. F. E.<br>Georgia Southern College<br>Professor of Biology<br>Statesboro, GA<br>30460-8042 Phone: (912)681-5487        | 20     | 09/91 | 0<br>3,000    |
| RMR | GLAC | An analysis of Ion Concentration and Deposition at St. Mary and Fire Weather Station NADP Monitoring Sites, Glacier National Park | Gibson, Mr. J. H.<br>Colorado State University<br>Natural Resource Ecology Lab<br>Fort Collins, CO<br>80523 Phone: (303)491-1978  | 0      | 00/99 | 2,500<br>0    |
| RMR | GLAC | Quantification of Federal reserved water rights   | Hansen, Mr. W. R.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8333 | 20     | 10/91 | 8,900<br>0    |
| RMR | GLAC | Exposure of the Lewis Thrust at Marias Pass Deformation in the Overthrust Plane   | Heine, M.<br>Federal Republic of Germany<br>An der Muhlenriede 36<br>3180 Wolfsburg 13<br>Fed. Rep. of Germany,                   | 10     | 12/90 | 0<br>0        |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| RMR | GLAC | Air/Vegetation Monitoring for Flouride.   | Hoagland, Ms. E.<br>Columbia Falls Aluminum Company<br>P.O. Box 10<br>Columbia Falls, MT<br>59912 Phone: (406)892-3261          | 0      | 00/99 | 0<br>0           |
| RMR | GLAC | Effects of the 1988 Red Bench Fire on<br>Coleopteran and Hymenopteran Populations in<br>Glacier National Park.                      | Ivie, Dr. M. A.<br>Montana State University<br>Entomology Research Laboratory<br>Bozeman, MT<br>59717-0002 Phone: (406)994-4610 | 33     | 01/91 | 25,000<br>24,194 |
| RMR | GLAC | Terrestrial Studies   | Key, Mr. C. H.<br>Glacier National Park<br>Geographer, Research Division<br>West Glacier, MT<br>59936 Phone: (406)888-5441      | 50     | 00/99 | 49,000<br>0      |
| RMR | GLAC | Revegetation of the dozer lines that<br>resulted from suppression efforts on the Red<br>Bench Fire                                  | Kurth, Ms. L.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441  | 25     | 12/93 | 25,000<br>0      |
| RMR | GLAC | Prescribed fire in two grasslands in the<br>North Fork of the Flathead River drainage   | Kurth, Ms. L.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441  | 0      | 00/93 | 0<br>0           |
| RMR | GLAC | Monitoring post-fire vegetation recovery in<br>Ponderosa pine and sedge meadow communities<br>in Glacier National Park, NW Montana. | Kurth, Ms. L.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441  | 33     | 09/91 | 15,570<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | GLAC | Management of exotic plant populations that burned in the 1988 Red Bench Fire  | Lange, Mr. D.<br>Glacier National Park<br>West Glacier, MT<br>59936<br>Phone: (406)888-5441                           | 25     | 12/93 | 0<br>0        |
| RMR | GLAC | Monitoring the effects of Global Warming Using Peripheral Rare Plants in Wet Alpine Tundra in Glacier National Park, Montana | Lesica, P.<br>P.O. Box 8944<br>Missoula, MT<br>59807<br>Phone:  | 0      | 00/99 | 1,000<br>0    |
| RMR | GLAC | Baseline monitoring transects in alpine wet tundra.  | Lesica, Mr. P.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812<br>Phone: (406)888-5441        | 0      | 00/91 | 1,000<br>0    |
| RMR | GLAC | Gray wolf prey base ecology in the North Fork Flathead River Drainage.   | Marcum, Mr. C. L.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812<br>Phone: (406)243-6237     | 2      | 00/99 | 15<br>1       |
| RMR | GLAC | Biology of the Bull Trout (Salvelinus confluentus) in Upper Kintla Lake, Glacier National Park, Montana                      | Marnell, Dr. L. F.<br>Aquatic Ecologist<br>Glacier National Park<br>West Glacier, MT<br>59936<br>Phone:               | 80     | 12/91 | 2,000<br>0    |
| RMR | GLAC | Fishes of Glacier National Park  | Marnell, Dr. L. F.<br>Aquatic Ecologist<br>Glacier National Park<br>West Glacier, MT<br>59936<br>Phone: (406)888-5441 | 10     | 12/91 | 1,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$  |
|-----|------|--|---|--------|-------|-----------------|
| RMR | GLAC | Fishery Investigations in the Lake McDonald Basin, Glacier National Park, Montana  | Marnell, Dr. L. F.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441                                 | 15     | 12/95 | 4,500<br>0      |
| RMR | GLAC | An analysis of potential sensitive plant species for long term monitoring in Glacier National Park.  | Maurer, Mr. B. A.<br>Brigham Young University<br>Department of Zoology<br>Provo, UT<br>84602 Phone: (801)378-2426             | 0      | 08/90 | 0<br>0          |
| RMR | GLAC | Nesting Ecology of Bald Eagles in Glacier National Park  | McClelland, Mr. B. R.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441                              | 60     | 10/92 | 20,000<br>8,000 |
| RMR | GLAC | Characteristics of nest, perch, and roost trees and associated forest stands within home ranges of nesting Bald Eagles in Glacier National Park, Montana | McClelland, Mr. B. R.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)243-5675            | 80     | 10/90 | 2,000<br>13,000 |
| RMR | GLAC | Higher fungi of Glacier National Park.   | Miller Jr., Dr. O. K.<br>VA Tech. & State University<br>Department of Biology<br>Blacksburg, VA<br>24061 Phone: (703)231-6765 | 90     | 00/99 | 0<br>0          |
| RMR | GLAC | Mortality of white-tailed deer in an area recently recolonized by wolves.  | Pletscher, Mr. D. H.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)243-6364             | 2      | 09/91 | 0<br>16,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| RMR | GLAC | Gray Wolf Prey Base Ecology (moose)   | Pletscher, Mr. D. H.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)243-6364 | 2      | 03/92 | 8<br>8           |
| RMR | GLAC | Wolf Ecology Project in Glacier National Park.  | Ream, Mr. R. R.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)243-4487      | 50     | 09/92 | 92<br>15         |
| RMR | GLAC | Population dynamics of the alpine annual, <i>Euphrasia arctica</i>  | Reynolds, Mr. D. W.<br>Eastern Kentucky University<br>Richmond, KY<br>40475 Phone: (606)622-2319                  | 25     | 08/91 | 0<br>0           |
| RMR | GLAC | The autumn concentration of bald eagles in Glacier National Park - ecology and management recommendations | Riley, Mr. B.<br>Glacier National Park<br>West Glacier, MT<br>59936 Phone: (406)888-5441                          | 85     | 10/91 | 5,000<br>14,000  |
| RMR | GLAC | Natural History - Ecology of the Inland Northwest.  | Rogers, Sr., Mr. T. H.<br>E. 10820 Maxwell Avenue<br>Spokane, WA<br>99206 Phone: (509)926-7949                    | 50     | 10/91 | 0<br>1,000       |
| RMR | GLAC | Application of Remote Sensing and Digital Image Analysis for Assessing Wildland Fire Severity             | Running, Mr. S. W.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)888-5441   | 5      | 05/91 | 22,900<br>16,800 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| RMR | GLAC | Remote sensing applications to fire intensity determination, post-fire succession mapping, and burn mosaic quantification. | Running, Mr. S. W.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)888-5441  | 0      | 00/91 | 23,000<br>0   |
| RMR | GLAC | Divide Creek watershed and flood assessment  | Smillie, Mr. G.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8303                          | 0      | 06/91 | 2,000<br>0    |
| RMR | GLAC | Backcountry/Frontcountry Baseline Water Studies  | Stanford, Dr. J.<br>University of Michigan<br>Flathead Lake Biological Station<br>Polson, MT<br>59860 Phone: (406)982-3301                               | 75     | 12/91 | 11,000<br>0   |
| RMR | GLAC | Quantification of Federal reserved water rights  | Stanford, Dr. J. A.<br>University of Montana<br>Flathead Lake Biological Station<br>Polson, MT<br>59860 Phone: (406)982-3301                             | 5      | 08/91 | 28,000<br>0   |
| RMR | GLAC | Delineation of critical park resource areas.   | Sundell, Mr. R. C.<br>Northwestern University<br>Argonne National Laboratory<br>9700 South Cass Avenue<br>Argonne, IL<br>60439-4815 Phone: (708)972-5341 | 50     | 12/90 | 0<br>0        |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | X done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| RMR | GLAC | Ecology of Fescue Grasslands in Glacier National Park  | Tyser, Dr. R. W.<br>University of Wisconsin<br>Department of Biology<br>Madison, WI<br>54601 Phone: (608)785-8238                    | 50     | 06/91 | 14,936<br>0     |
| RMR | GLAC | Fire effects and vegetative recovery in sedge meadow and ponderosa pine communities.   | Wakamoto, Mr. R.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)888-5441                        | 0      | 00/91 | 7,800<br>15,570 |
| RMR | GLAC | Monitoring Post-Fire Vegetation Recovery in Ponderosa Pine and Sedge Meadow Communities in Glacier National Park, NW Montana | Willard, E. E.<br>University of Montana<br>School of Forestry<br>Missoula, MT<br>59812 Phone: (406)243-6665                          | 40     | 06/91 | 0<br>14,000     |
| RMR | GLAC | Investigation of the Lewis Thrust System in Glacier National Park, Montana.  | Yin, Dr. A.<br>University of California<br>Department of Earth & Space Science<br>Los Angeles, CA<br>90024-1567 Phone: (213)825-8752 | 50     | 06/91 | 0<br>60,000     |
| RMR | GRKO | Exotic weed composition and distribution on Grant-Kohrs Ranch National Historic Site and recommended control alternatives.   | Sawyer, Mr. P. T.<br>Montana College of Mineral Sciences<br>Park Street<br>Butte, MT<br>59701 Phone: (406)496-4227                   | 75     | 02/90 | 3,000<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| RMR | GRSA | A Dendroclimatological Research Project for Great Sand Dunes National Monument | Mangimeli, Mr. J. A.<br>White Sands National Monument<br>P.O. Box 458<br>Alamogordo, NM<br>88310 Phone: (505)479-6124        | 100    | 12/89 | 0<br>3,000      |
| RMR | GRSA | Documentation of Scarred Trees, Great Sand Dunes National Monument             | Martorano, Ms. M. A.<br>Goodson & Associates, Inc.<br>11949 West Colfax Avenue<br>Lakewood, CO<br>80215 Phone: (303)233-2244 | 100    | 02/89 | 2,000<br>1,000  |
| RMR | GRSA | Great Sand Dunes National Monument, List Classified Structures Inventory       | Miller, Mr. S.<br>Western Historical Studies, Inc.<br>1225 Atlantis Avenue<br>LaFayette, CO<br>80026 Phone: (303)666-6200    | 95     | 02/90 | 4,000<br>0      |
| RMR | GRSA | Ground water & the stabilizatioin of sand masses                               | Stewart, Dr. D. C.<br>Adams State College<br>Department of Geology<br>Great Sand Dunes NM<br>Alamosa, NM<br>81101 Phone:     | 5      | 12/90 | 10,000<br>5,000 |
| RMR | GRSA | Cultural Resources Survey of Great Sand Dunes National Monument Developed Area | Williams, Mr. W.<br>Anthro-Evaluations<br>Star Route<br>Ft. Garland, CO<br>81133 Phone: (719)379-3276                        | 75     | 02/90 | 1,000<br>1,000  |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | WPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| RMR | GRTE | Bison Monitoring Program   | Cain, S.<br>Grand Teton National Park<br>P.O. Drawer 170<br>Moose, WY<br>83012 Phone: (307)733-2880  | 0      | 00/99 | 5,000<br>0     |
| RMR | GRTE | Black Bear Monitoring Program  | Cain, S.<br>Grand Teton National Park<br>P.O. Drawer 170<br>Moose, WY<br>83012 Phone: (307)733-2880  | 0      | 00/99 | 5,000<br>0     |
| RMR | GRTE | Distribution, Home Range, and Habitat of Boreal Owls in GTNP   | Duffy, K.<br>Grand Teton National Park<br>P.O. Box 170<br>Moose, WY<br>83012 Phone: (307)733-2880  | 20     | 00/99 | 1,200<br>2,650 |
| RMR | GRTE | Changes in Geomorphologic Processes in the Snake River following impoundment of Jackson Lake and potential changes due to 1988 fires in the watershed. | Marston, R. A.<br>University of Wyoming<br>Dept. of Geography and Recreation<br>P.O. Box 3371, University Station<br>Laramie, WY<br>82071 Phone: (307)766-6386 | 30     | 00/99 | 28,800<br>0    |
| RMR | GRTE | Effects of Fire on Hypogeous Fungi, Spore Dispersed and Dependent Flora Establishment Soils  | Miller, Dr. S. L.<br>University of Wyoming<br>Department of Botany<br>Laramie, WY<br>82071 Phone: (307)766-2235  | 30     | 09/92 | 15,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | GRTE | Water-use investigation  | Pettee, Mr. C. W.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8321               | 20     | 01/91 | 24,000<br>0   |
| RMR | GRTE | Great Gray Owl Abundance, Territory Size,<br>and Habitat in GTNP                         | Reid, M.<br>Grand Teton National Park<br>P.O. Box 170<br>Moose, WY<br>83012 Phone: (307)733-2880  | 30     | 00/99 | 3,000<br>0    |
| RMR | GRTE | Instream gravel extraction impact assessment   | Smillie, Mr. G.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8303                 | 30     | 12/90 | 0<br>0        |
| RMR | GRTE | Density Dependent Population Regulation, and<br>the Effects of Fire on Jackson Hole Elk. | Smith, B.<br>U.S. Fish and Wildlife Service<br>675 E. Broadway<br>P.O. Box C<br>Jackson, WY<br>83001 Phone: (307)733-9212                       | 10     | 09/92 | 15,000<br>0   |
| RMR | GRTE | Earthquake Hazards   | Smith, R.<br>University of Utah<br>Mines and Earth Sciences<br>717 W.C. Browning Bldg.<br>Salt Lake City, UT<br>84112-1183 Phone: (801)581-7162 | 80     | 05/90 | 7,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| RMR | GRTE | The Movements, Productivity, and Habitat-use Patterns of Trumpeter Swans.                                      | Squires, J.<br>University of Wyoming<br>Cooperative Wildlife Research Unit<br>Laramie, WY<br>82071 Phone: (307)766-2091  | 85     | 08/90 | 15,000<br>0    |
| RMR | GRTE | Monitoring and marking of harlequin ducks in GTNP  | Wallen, R.<br>Grand Teton National Park<br>P.O. Box 170<br>Moose, WY<br>83012 Phone: (307)733-2880   | 100    | 09/89 | 1,150<br>1,050 |
| RMR | JECA | Bats of Jewel Cave National Monument   | Anderson, J. M.<br>Fort Hays State University<br>Department of Biology<br>Hays, KS<br>67601 Phone: (913)628-5664   | 100    | 08/89 | 300<br>2,100   |
| RMR | KNRI | Impacts of Prescribed Burning on Archeological and Biological Resources of the Knife River Indian Village NHS. | Sayler, Dr. R. D.<br>University of North Dakota<br>Grand Forks, ND   | 100    | 12/89 | 14,000<br>0    |
| RMR | MEVE | Effects of Air Pollution on Cryptogamic Crusts   | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164   | 90     | 11/90 | 20,000<br>0    |
| RMR | MEVE | Biological Surveys on Public Lands: NPS/FWS Interagency Agreement: IA-1200-9-0002)                             | Bogan, Mr. M. A.<br>U.S. Fish & Wildlife Service<br>National Ecology Research Center<br>4512 McMurray Avenue<br>Fort Collins, CO<br>80525 Phone: (303)226-9463 | 20     | 12/93 | 5,000<br>5,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| RMR | MEVE | The Geology of Mesa Verde  | Griffitts, Dr. M.<br>810 14th Street<br>Boulder, CO<br>80302 Phone: (303)044-3014   | 75     | 00/99 | 2,000<br>24,000 |
| RMR | MEVE | A Study of the Geology of Mancos Shale for long term research in Cretaceous Biostratigraphy and Paleocyanography of the Southern Western Interior Seaway: Phase I, Northern San Juan Basin | Leckie, Mr. R. M.<br>University of Massachusetts<br>Morrill Science Center<br>Amherst, MA<br>01003 Phone: (413)545-2286                     | 50     | 00/91 | 0<br>0          |
| RMR | MEVE | DNA Extraction from Ancient Mummified Human Tissue   | O'Rourke, Dr. D.<br>University of Utah<br>Department of Anthropology<br>102 Stewart Building<br>Salt Lake, UT<br>84112 Phone: (801)581-7454 | 20     | 12/90 | 0<br>0          |
| RMR | MEVE | Spruce Tree & Far View Ruins: Solar Efficiency of a Cliff Dwelling and an Open Site Structure at Mesa Verde  | Quiatt, Dr. D.<br>University of Colorado<br>Department of Anthropology<br>1100 14th Street<br>Denver, CO<br>80202 Phone: (303)629-8313      | 35     | 00/99 | 0<br>0          |
| RMR | MEVE | Analysis of Mancos Canyon Skeletal Material  | White, Dr. T.<br>University of California<br>Department of Anthropology<br>Berkeley, CA<br>94720 Phone:                                     | 90     | 00/90 | 0<br>0          |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| RMR | NABR | Dendroclimatic Characterization of Southwestern Paleoclimate during the Last 2000 years   | Dean, Mr. J. S.<br>University of Arizona<br>Laboratory of Tree-Ring Research<br>Tucson, AZ<br>85721 Phone: ( ) -                  | 28     | 03/91 | 0<br>152,024  |
| RMR | NABR | Ecology of rattlesnakes in disturbed environments: <i>Crotalus viridis concolor</i> densities and movement patterns in the vicinity of the residence/Visitor Center area of Natural Bridges NM. | Graham, Dr. T.<br>National Park Service<br>Southeast Utah Group<br>125 W. 2nd S.<br>Moab, UT<br>84532 Phone:                      | 40     | 05/91 | 4,000<br>0    |
| RMR | PISP | Assessment of spring flow decline (Water Rights)  | Pettee, Mr. C. W.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8321 | 70     | 06/91 | 0<br>0        |
| RMR | RMNP | Long-term observation and documentation of condition of Rowe Glacier  | Scott, Mr. R. B.<br>832 N. Lexington Street<br>Arlington, VA<br>22205 Phone: (703)243-4138  | 0      | 00/99 | 0<br>0        |
| RMR | ROMO | Faunal survey of the Dytiscidae (Coleoptera) of Colorado.   | Barnett Jr., Mr. D. J.<br>2025 Jerry Murphy Rd. #223<br>Pueblo, CO<br>81001 Phone: (719)543-8472                                  | 85     | 11/90 | 0<br>0        |
| RMR | ROMO | Effects of Acid Precipitation on Ecosystem  | Baron, J.<br>National Park Service  | 80     | 00/99 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| RMR | ROMO | Long-term ecological research in Loch Vale Watershed, ROMO | Baron, Ms. J.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)491-1968           | 80     | 09/92 | 98,600<br>30,000 |
| RMR | ROMO | Trails as Conduits to Exotic Plant Movement                | Benninger, M.<br>Miami University of Ohio   | 100    | 00/99 | 0<br>0           |
| RMR | ROMO | Verification of Lake Productivity Index                    | Bergerson, E.<br>Colorado State University<br>Ft. Collins, CO<br>80523 Phone:   | 75     | 00/99 | 0<br>0           |
| RMR | ROMO | The Influence of Domestic Herbivores on Plants             | Bock, Dr. J. H.<br>University of Colorado<br>EPO Biology Box 334<br>Boulder, CO<br>80309 Phone:   | 100    | 12/89 | 0<br>56,000      |
| RMR | ROMO | Environmental Effects on C4 Photosynthesis                 | Bowman, Dr. W. D.<br>University of Colorado<br>Department of EPO Biology<br>Campus Box 334<br>Boulder, CO<br>80309 Phone: (303)492-2557 | 5      | 01/92 | 0<br>4,740       |
| RMR | ROMO | Geology of Park  | Braddock, W.<br>U.S. Geological Survey  | 100    | 00/99 | 0<br>0           |
| RMR | ROMO | Implications of Multi-trunk Growth Form of Limber Pine     | Carsey, K.<br>3849 Orion Ct.<br>Boulder, CO<br>80304 Phone:   | 75     | 09/90 | 0<br>1,650       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | WPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| RMR | ROMO | Foraging Strategies of White-Tailed Ptarmigan               | Clark, J. A.<br>Washington State University<br>Pullman, WA  | 100    | 00/99 | 0<br>0        |
| RMR | ROMO | A study of chemical weathering rates in an alpine watershed | Clow, Mr. D. W.<br>University of Wyoming<br>Department of Geology<br>P.O. Box 3006<br>Laramie, WY<br>82071 Phone: (307)766-2886 | 20     | 12/90 | 0<br>0        |
| RMR | ROMO | Abert Squirrel Survey                                       | Connor, J.<br>National Park Service   | 20     | 00/99 | 0<br>0        |
| RMR | ROMO | Riparian Classification of the Front Range of Colorado      | Cooper, Mr. D.<br>3803 Silver Plume<br>Boulder, CO<br>80303 Phone: (303)499-6441  | 75     | 01/90 | 0<br>0        |
| RMR | ROMO | Wetland Plant-Soil-Hydrology in Big Meadows                 | Cooper, Dr. D. J.<br>Colorado School of Mines<br>Dept. of Environmental Sciences<br>Golden, CO<br>80401 Phone: (303)499-6441    | 0      | 00/99 | 0<br>14,000   |
| RMR | ROMO | Riparian Classification of the Front Range of Colorado.     | Cooper, Mr. D.<br>3803 Silver Plume<br>Boulder, CO<br>80303 Phone: (303)499-6441  | 75     | 01/90 | 0<br>12,000   |
| RMR | ROMO | Lawn Lake Revegetation                                      | Dott, C.<br>University of Wisconsin   | 100    | 00/99 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | ROMO | Paleontology of Cascade Site, RMNP                             | Elias, Mr. S. A.<br>University of Colorado<br>Instaar, Campus Box 450<br>Boulder, CO<br>80309 Phone:                                  | 20     | 10/90 | 0<br>0        |
| RMR | ROMO | Reproductive Patterns of Solitary versus Clustered Limber Pine | Feldman, R.<br>University of Colorado at Denver<br>Department of Biology<br>1100 14th St.<br>Denver, CO<br>80202 Phone: (303)572-8218 | 98     | 05/90 | 0<br>1,500    |
| RMR | ROMO | Small Owl Study  | Figgs, M.<br>Boulder County Nature Assn.<br>Boulder, CO   | 0      | 00/99 | 0<br>0        |
| RMR | ROMO | Breeding Bird Census in Copeland Willow Carr                   | Figgs, M.<br>Colorado University<br>Boulder, CO   | 0      | 00/99 | 0<br>0        |
| RMR | ROMO | Revegetation of the Ouzel Burn                                 | Gellhorn, J.  | 80     | 00/99 | 0             |
| RMR | ROMO | Population Ecology of White-tailed Ptarmigan                   | Giesen, K. M.<br>Colorado Division of Wildlife<br>317 West Prospect<br>Ft. Collins, CO<br>80526 Phone:                                | 95     | 12/91 | 0<br>0        |
| RMR | ROMO | Bedrock Sampling in the Presence of Dunes                      | Gomez, Mr. B.<br>Indiana State University<br>Department of Geography & Geology<br>Terre Haute, IN<br>47809 Phone: (812)237-2444       | 50     | 07/91 | 0<br>0        |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$   |
|-----|------|--|---|--------|-------|----------------|
| RMR | ROMO | Effects of Herbage Availability on Foraging Behavior on Bighorn Sheep  | Goodson, M.<br>Colorado State University  | 100    | 00/99 | 0<br>0         |
| RMR | ROMO | Movements and Distribution of Bighorn Sheep in the Never Summer Mountains  | Goodson, M.<br>National Park Service<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371              | 80     | 05/90 | 5,000<br>3,500 |
| RMR | ROMO | Analysis of Growth Trends and Variation in Conifers from the Colorado Front Range  | Graybill, Dr. D. A.<br>University of Arizona<br>Tree-Ring Lab<br>Rm. 105 West Stadium<br>Tucson, AZ<br>85721 Phone: (602)621-2945 | 100    | 12/89 | 0<br>0         |
| RMR | ROMO | Reconstructing the roles of ontogenetic transformations in the hierarchial diversification of floral forms of Besseyia (Sorophilarae). | Hafford, Mr. L.<br>University of Minnesota<br>Department of Biology<br>Duluth, MN<br>55812-2496 Phone:                            | 75     | 00/99 | 0<br>0         |
| RMR | ROMO | Vegetation Cover Map   | Hess, K.<br>712 Stagecoach Dr.<br>Las Cruces, NM<br>88001 Phone: (505)522-1172  | 85     | 12/90 | 6,550<br>0     |
| RMR | ROMO | Fire Effects on the High Elevation Forest-Alpine Ecotone: Rates of Regeneration and the Succession of Growth Form                      | Huckaby, L. S.<br>Colorado State University<br>Dept. of Forest and Wood Sciences<br>Fort Collins, CO<br>80523 Phone:              | 80     | 06/90 | 0<br>7,200     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| RMR | ROMO | Dissertation research: Sociality & Behavioral Ecology of Wyoming Ground Squirrels, Spermophilus Elogans.       | Hunley, Ms. J.<br>University of Kansas<br>Division of Biology<br>Lawrence, KS<br>66044 Phone: (913)843-1163                       | 5      | 09/92 | 0<br>150,000 |
| RMR | ROMO | Plant Succession on the Lawn Lake Alluvial Fan   | Keigley, R. B.<br>National Park Service<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371           | 100    | 00/90 | 0<br>0       |
| RMR | ROMO | Restoration of Plant Communities   | Keigley, R. B.<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371                                    | 0      | 00/93 | 29,400<br>0  |
| RMR | ROMO | Riparian Vegetation Distribution in relation to elevation and geomorphology for the Cache la Poudre River, CO. | Kittel, Ms. G. M.<br>University of Wyoming<br>Department of Biology<br>P.O. Box 3165<br>Laramie, WY<br>82071 Phone: (307)766-4393 | 50     | 10/90 | 0<br>1,000   |
| RMR | ROMO | Water Quality Survey   | Kondratieff, B.<br>National Park Service  | 100    | 00/99 | 0<br>0       |
| RMR | ROMO | Glacial Geology and Late Quaternary History of Roaring River Valley, RMNP.                                     | Madole, R. F.<br>U.S. Geological Survey<br>Box 25046, MS 966, DFC<br>Denver, CO<br>80225 Phone: (303)236-1617                     | 50     | 10/92 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | WPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| RMR | ROMO | Vegetation Recovery at Lawn Lake  | Mansfield, D. H.<br>Rollins College<br>Winterpark, FL<br>32789 Phone:   | 10     | 00/99 | 0<br>0       |
| RMR | ROMO | Black Bear Ecology  | McCutchen, H. E.<br>National Park Service<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone:   | 85     | 09/90 | 40,000<br>0  |
| RMR | ROMO | Soil Development and Erosion on a Pinedale<br>Catena, Ten Years After the Ouzel Lake Burn,<br>RMNP. | McMillan, M. E.<br>Department of Geological Sciences<br>Campus Box 250<br>Denver, CO<br>80309 Phone: (303)492-2609  | 75     | 05/90 | 0<br>0       |
| RMR | ROMO | Determine sense of movement on Precambrian<br>Shearzones NE Front Range, CO                         | Nesse, Mr. W.<br>University of Northern Colorado<br>Department of Earth Sciences<br>Greely, CO<br>80639 Phone: (303)351-2830                                    | 40     | 09/90 | 0<br>0       |
| RMR | ROMO | Butterfly Inventory   | Opler, P.<br>Fish and Wildlife Service  | 30     | 00/99 | 0<br>0       |
| RMR | ROMO | The black flies (Diptera: Simuliidae) of<br>North America   | Peterson, Dr. R. V.<br>Department of Agriculture<br>Systematic Entomology Laboratory<br>U.S Nat'l Museum of Natural History<br>Washington, D.C.<br>20560 Phone: | 5      | 00/99 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|---|---|--------|-------|-----------------|
| RMR | ROMO | Colorado Native Plant Society Research Project/RMNP Cooperative Restoration | Richards, Ms. V.<br>3125 West Momouth Avenue<br>Englewood, CO<br>80110 Phone: (303)794-5432   | 20     | 05/94 | 0<br>0          |
| RMR | ROMO | An application of Relative Age Dating Techniques to Front Range Cirques.    | Routt, Mr. B.<br>Ohio State University<br>Department of Geology & Minerology<br>125 South Ovel Mell<br>Columbus, OH<br>43210 Phone: (614)292-5477 | 70     | 06/90 | 0<br>0          |
| RMR | ROMO | Breeding Bird Atlas of Colorado   | Ryder, Dr. R. A.<br>Colorado State University<br>Wildlife Biology<br>Fort Collins, CO<br>80523 Phone: (303)484-6547                               | 50     | 08/92 | 0<br>0          |
| RMR | ROMO | Vegetation Community Study  | Stevens, D. R.<br>National Park Service   | 0      | 00/99 | 0<br>0          |
| RMR | ROMO | Aquatic Resource Survey   | Stevens, D. R.<br>National Park Service<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371                           | 0      | 12/93 | 5,000<br>10,000 |
| RMR | ROMO | Ungulate Winter Habitat Conditions and Management                           | Stevens, D. R.<br>National Park Service<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371                           | 80     | 04/93 | 8,000<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| RMR | ROMO | Native Fish Restoration  | Stevens, D. R.<br>Rocky Mountain National Park<br>Estes Park, CO<br>80517 Phone: (303)586-2371                                | 0      | 00/99 | 15,000<br>5,000 |
| RMR | ROMO | Hydrology and Geomorphology of Fall River  | Thorne, C.  | 100    | 00/99 | 0               |
| RMR | ROMO | Acidification of Front Range Lakes   | Turk, J.<br>U.S. Geological Survey<br>Bldg. 53, MS 415<br>Denver Federal Center<br>Lakewood, CO<br>80225 Phone: (303)236-4886 | 80     | 00/99 | 0<br>30,000     |
| RMR | ROMO | Recovery Patterns of Forest Following Disturbance                                  | Veblen, T. T.<br>Colorado University<br>Fort Collins, CO<br>80521 Phone:  | 65     | 00/99 | 0<br>0          |
| RMR | ROMO | Recovery of Alpine Tundra Following Trampling                                      | Willard, B.<br>Colorado School Mines<br>Goldens, CO<br>80401 Phone:   | 0      | 00/99 | 0<br>0          |
| RMR | ROMO | A Study of Plant Geography from Southern Wyoming into Rocky Mountain National Park | Williams, R. L.<br>University of Wyoming<br>1701 South 17th St.<br>Laramie, WY<br>82070 Phone: (307)742-6543                  | 90     | 09/90 | 0<br>0          |
| RMR | ROMO | Survey of Special Interest Plants  | Yeatts, L.<br>1395 Nile Street<br>Golden, CO<br>80401 Phone: (303)279-3427  | 95     | 09/89 | 0<br>265        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| RMR | THRO | Experimental Biological Control (Insects) of Leafy Spurge in THRO      | Carlson, Dr. R.<br>North Dakota State University<br>Department of Entomology<br>Hultz Hall, Room 202<br>Fargo, ND<br>58105 Phone: (701)237-7581 | 10     | 00/99 | 0<br>0          |
| RMR | THRO | Ecology, Range Use, and Habitat Preference of Reintroduced Elk in THRO | Irby, Dr. L.<br>Montana State University<br>Department of Biology<br>Bozeman, MT<br>59717 Phone: (406)994-3252                                  | 100    | 10/89 | 29,000<br>1,000 |
| RMR | THRO | Feral Horse Movements, Habitat Use, and Population Dynamics in THRO    | Marlow, Dr. C.<br>Montana State University<br>Bozeman, MT<br>59717 Phone: (406)994-3721   | 20     | 12/91 | 5,809<br>3,085  |
| RMR | THRO | Visitor Expectations and Assessment of External Impacts at THRO        | Wallace, Dr. G.<br>University of Colorado<br>Dept. of Recreation & Landscape Arc<br>Ft. Collins, CO<br>80523 Phone: (303)491-5165               | 75     | 06/90 | 13,000<br>0     |
| RMR | THRO | Rare Plants Inventory of THRO  | Wieland, R. G.<br>North Dakota Parks & Recreation Dep<br>1424 W. Century Avenue, Suite 202<br>Bismarck, ND<br>58501 Phone: (701)224-4887        | 85     | 09/90 | 5,000<br>3,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$  |
|-----|------|--|---|--------|-------|----------------|
| RMR | WICA | Patterns of Plant Succession on Abandoned Prairie Dog Towns  | Bock, J. H.<br>University of Colorado<br>E.P.O. Biology, Box 334<br>Boulder, CO<br>80309 Phone: (303)492-7758                   | 60     | 03/90 | 2,000<br>1,000 |
| RMR | WICA | Investigation of the Hydrologic Parameters of Water Level, Water Temperature, Air Temperature, and Barometric Pressure at Windy City Lake, in Wind Cave. | Greene, E.<br>U.S. Geological Survey, WRD<br>Room 237 - 515 Ninth St.<br>Rapid City, SD<br>57701 Phone:                         | 90     | 01/90 | 670<br>3,350   |
| RMR | WICA | Vigilance and Group Size Assessment of Black-tailed Prairie Dogs   | Kildaw, S. D.<br>University of Alberta<br>Zoology Office<br>Edmonton, Alberta<br>T6G 2E9 Phone:                                 | 50     | 10/90 | 0<br>3,000     |
| RMR | WICA | Time Budgets of Black-Tailed Prairie Dogs: Age and Seasonal Effects  | Loughry, J.<br>Southwestern University<br>Department of Biology<br>Georgetown, TX<br>78626 Phone: (512)863-1622                 | 40     | 09/91 | 0<br>2,000     |
| RMR | WICA | Geology of Wind and Jewel Caves  | Palmer, A. N.<br>State University of New York<br>Department of Earth Sciences<br>Oneonta, NY<br>13820-4015 Phone: (607)431-3064 | 60     | 00/99 | 0<br>0         |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| RMR | WICA | The Mammalian Predator Community of Wind Cave National Park   | Taylor, R. J.<br>Utah State University<br>Dept. of Fisheries and Wildlife<br>Logan, UT<br>84322-5200 Phone: (801)750-2465 | 90     | 04/90 | 14,000<br>4,200 |
| RMR | WICA | Community Change at Wind Cave National Park   | Tieszen, L. L.<br>Augustana College<br>Biology Department<br>Sioux Falls, SD<br>57197 Phone:                              | 85     | 01/90 | 3,200<br>5,300  |
| RMR | YELL | Expansion of Comparative Collection   | Adams, Mr. W. R.<br>Indiana University<br>Zooarcheology Lab   | 1      | 00/99 | 0<br>0          |
| RMR | YELL | Late-Holocene Mammalian Fauna of Lamar Cave and its implications for ecosystems dynamics in Yellowstone National Park, Wyoming. | Agemnbroad, Dr. L. D.<br>Northern Arizona University<br>Flagstaff, AZ<br>86001 Phone:                                     | 50     | 00/99 | 20,000<br>0     |
| RMR | YELL | Postfire Vegetation Dynamics in Lodgepole Pine Communities  | Anderson, Mr. J. E.<br>Idaho State University<br>Pocatello, ID  | 20     | 00/99 | 0<br>0          |
| RMR | YELL | Thermophilic Diatoms from hot springs and geysers in Yellowstone National Park  | Andrews, Mr. K. J.<br>Colorado College<br>Colorado Springs, CO<br>80903 Phone:  | 45     | 00/99 | 0<br>1,000      |
| RMR | YELL | Dendrochronology in the Yellowstone Fossil Forests.   | Arct, Mr. M.<br>Loma Linda University   | 99     | 06/90 | 0<br>650        |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| RMR | YELL | Ecology of Lakes and Streams  | Averett, Mr. R. C.<br>U.S. Geological Survey<br>Water Resources Division<br>HRP 5293 Ward Road<br>Arvada, CO<br>80002 Phone: | 70     | 00/99 | 0<br>12,000     |
| RMR | YELL | Environmental Chemistry and biology of the Gibbon River, Yellowstone National Park                            | Barkan, Mr. D. W.  | 50     | 00/99 | 0<br>52,101     |
| RMR | YELL | A Scientific Research Opportunity for Elementary Teachers in the State of Wyoming.                            | Barkan, Mr. D. W.<br>Northwest College<br>Powell, WY<br>82435 Phone:   | 50     | 00/99 | 0<br>4,000      |
| RMR | YELL | Late-Quaternary vegetational and climatic history of the Yellowstone/Grand Teton region                       | Barnosky, Ms. C. W.<br>Carnegie Museum of Natural History  | 30     | 00/99 | 25,771<br>0     |
| RMR | YELL | Fire history of the Lamar River Drainage, Yellowstone National Park, Wyoming.                                 | Barrett, Mr. S. W.<br>University of Wyoming<br>Missoula, MT  | 60     | 00/99 | 17,700<br>0     |
| RMR | YELL | INT-4501 Mountain Parks.  | Bartos, Mr. D. L.<br>USDA Forest Service   | 100    | 00/99 | 0<br>900        |
| RMR | YELL | Yellowstone National Park visitor attitudes toward fire and wildlife management issues.                       | Bath, A. J.<br>University of Calgary<br>Alberta, Canada  | 40     | 00/99 | 20,000<br>1,000 |
| RMR | YELL | Actualistic Studies of Fire on Contemporary Landscapes: Toward an Understanding of Archaeological Occurrences | Bellomo, R. V.<br>University of Wisconsin<br>Milwaukee, WI   | 20     | 00/99 | 0<br>16,845     |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$    |
|-----|------|---|--|--------|-------|------------------|
| RMR | YELL | Habitat Preferences of unexploited pine marten populations in Yellowstone National Park | Bissonette, Dr. J. A.<br>Utah State University<br>Utah Coop.-Fish & Wldlf. Research<br>Logan, UT<br>84322 Phone: | 15     | 00/99 | 19,952<br>16,006 |
| RMR | YELL | Lepidopteran collections  | Bowser, G.   | 70     | 00/99 | 0                |
| RMR | YELL | Fire Ecology and management of whitebark pine   | Bunting, Mr. S. C.<br>University of Idaho<br>Moscow, ID<br>83843 Phone:  | 80     | 00/99 | 0<br>32,641      |
| RMR | YELL | Effects of Winter recreational use on elk in Yellowstone National Park                  | Cassirer, E. F.<br>University of Idaho<br>Dept. of Fish & Wildlife Resources<br>Moscow, ID<br>83843 Phone:       | 75     | 00/99 | 31,000<br>1,000  |
| RMR | YELL | Metabolic Activity of Photosynthetic Microorganisms within Hot Spring Microbial Mats    | Castenholz, Dr. R. W.<br>University of Oregon<br>Dept. of Biology<br>Eugene, OR<br>97403 Phone:                  | 95     | 00/99 | 0<br>0           |
| RMR | YELL | Dating Geomorphologic Surfaces using cosmogenic He.                                     | Cerling, T. E.<br>University of Utah<br>Salt Lake City, UT<br>84112 Phone:                                       | 30     | 00/99 | 0<br>2,000       |
| RMR | YELL | Thermophilic microorganisms as source of heat stable oxidase and peroxidase             | Combie, Ms. J.<br>J.K. Research  | 10     | 00/99 | 0<br>236,000     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| RMR | YELL | Biomass and nitrogen responses to grazing of upland steppe on Yellowstone's northern winter range.                       | Coughenour, Mr. M. B.<br>Colorado State University<br>Fort Collins, CO  | 100    | 00/99 | 0<br>0       |
| RMR | YELL | Effects of 1988 Fires on ecology of coyotes in Yellowstone National Park: Baseline Preceding possible Wolf Recovery      | Crabtree, Mr. R. L.   | 20     | 00/99 | 29,700<br>0  |
| RMR | YELL | Faunal Identification Collection   | Creasman, Mr. S. D.<br>Western Wyoming College<br>Archaeological Services<br>Natural History Museum<br>Rock Springs, WY<br>82901 Phone:   | 0      | 00/99 | 0<br>0       |
| RMR | YELL | National Register Nomination Preparation for Obsidian Cliff and Obsidian Resource Procurement, Yellowstone National Park | Davis, L. B.<br>Montana State University<br>Department of Sociology<br>Bozeman, MT<br>59717 Phone:  | 60     | 00/99 | 22,995<br>0  |
| RMR | YELL | Winter Nutritional Assessment of elk and bison in Yellowstone National Park  | DelGiudice, Mr. G. D.<br>Veterans Administration Medical Ctr<br>Research Service-151<br>1 Veterans Dr.<br>Minneapolis, MN<br>55417 Phone: | 80     | 00/99 | 21,000<br>0  |
| RMR | YELL | Status and distribution of Sandhill and Whooping Cranes summering in Yellowstone National Park                           | Drewien, Mr. R. C.<br>University of Idaho<br>Wildlife Research Institute<br>Moscow, ID<br>83843 Phone:                                    | 90     | 00/99 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
| RMR | YELL | Basic Microbial Enhanced Oil Recovery Research                                    | Dugan, P. R.<br>Idaho National Engineering Lab.   | 10     | 00/99 | 0<br>550,000   |
| RMR | YELL | Physical processes in large silicic magma systems.                                | Dzurisin, Mr. D.<br>U.S. Geological Survey<br>Cascades Volcano Observatory                          | 75     | 00/99 | 0<br>50,000    |
| RMR | YELL | Thermoluminescence dating of lake sediments.                                      | Easterbrook, Mr. D.<br>Washington University  | 0      | 00/99 | 0<br>0         |
| RMR | YELL | Lichens of Yellowstone National Park  | Eversman, Ms. S.<br>Montana University<br>Bozeman, MT   | 95     | 00/99 | 0<br>0         |
| RMR | YELL | Stream classification of the Lamar River Drainage                                 | Ewing, Mr. R.<br>Yellowstone National Park<br>Yellowstone N.P., WY<br>82190 Phone:                  | 75     | 00/99 | 0<br>0         |
| RMR | YELL | Sedimentology, microbiology, and stable isotope geochemistry of Modern Hot Spings | Farmer, Dr. J. D.<br>University of California<br>Dept. of Earth & Space Sciences<br>Los Angeles, CA | 30     | 00/99 | 0<br>1,000     |
| RMR | YELL | Study of Pilobolus from Yellowstone National Park                                 | Foos, Mr. K. M.<br>Indiana University East<br>Richmond, IN<br>47374 Phone:                          | 80     | 00/99 | 0<br>0         |
| RMR | YELL | Interpretation of the Geochemistry of Thermal Waters                              | Fournier, R. O.<br>U.S. Geological Survey   | 50     | 00/99 | 0<br>45,000    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| RMR | YELL | Grizzly Bear Behavior  | French, Dr. S. P.<br>Yellowstone Grizzly Foundation   | 25     | 00/99 | 0<br>0           |
| RMR | YELL | Monitoring of Thermal Chloride Flux in<br>Yellowstone National Park  | Friedman, Mr. I.<br>U.S. Geological Survey<br>Branch of Isotope Geology   | 0      | 00/99 | 20,000<br>40,000 |
| RMR | YELL | The effect of organic carbon amounts on soil<br>hydrphobicity in canopy burned lodgepole<br>pine forest  | Garrett, A.<br>Carleton College<br>Department of Geology<br>Department of Biology<br>Northfield, MN<br>55057 Phone:         | 100    | 03/90 | 0<br>0           |
| RMR | YELL | Grizzly Bear Aversive Conditioning Study   | Gillin, C. M.<br>Wyoming Game & Fish Dept.  | 95     | 00/99 | 0<br>70,000      |
| RMR | YELL | Zonation Pattern of Geothermal Vents   | Glime, Ms. J. M.<br>Michigan Technological University<br>Houghton, MI   | 0      | 00/99 | 0<br>0           |
| RMR | YELL | The effects of the 1988 Clover-Mist Fire on<br>the Cutthroat Trout ( <i>Oncorhynchus Clerki</i> )<br>Population of Cache Creek, Yellowstone<br>National Park | Gould, Mr. W. R.<br>Montana State University<br>Montana Cooperative<br>Fishery Research Unit<br>Bozeman, MT<br>59717 Phone: | 100    | 09/89 | 0<br>2,000       |
| RMR | YELL | North Boundary Geothermal Connections<br>Program   | Hamilton, Mr. W. L.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82100 Phone:           | 60     | 00/99 | 0<br>0           |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$     |
|-----|------|--|---|--------|-------|-------------------|
| RMR | YELL | Lake Yellowstone Caldera Deformation History   | Hamilton, Mr. W. L.<br>Yellowstone National Park-NPS<br>Yellowstone N.P., WY<br>82190 Phone:                        | 25     | 00/99 | 0<br>0            |
| RMR | YELL | Movements of bald eagles in the Greater Yellowstone Ecosystem                                | Harmata, Mr. A.<br>Montana State University<br>Biology Department<br>Bozeman, MT<br>59717 Phone:                    | 95     | 00/99 | 50,000<br>250,000 |
| RMR | YELL | Ecology of the mountain lion in the Yellowstone Ecosystem                                    | Havocher, Mr. M.<br>Wildlife Research Institute   | 50     | 00/99 | 30,000<br>70,000  |
| RMR | YELL | Flow Structure, Differences between sedimentary and igneous rocks                            | Heine, N. H.<br>Universitat Braunschweig  | 10     | 00/99 | 0<br>300          |
| RMR | YELL | Collection of Microorganisms from the Thermal Springs and Pools at Yellowstone National Park | Himmel, Dr. M. E.<br>Solar Energy Research Institute<br>Biotechnology Research Branch                               | 50     | 00/99 | 0<br>5,000        |
| RMR | YELL | Pocket gophers, plant resources, and montane vegetation                                      | Huntly, Dr. N.<br>Idaho State University<br>Pocatello, ID<br>83843 Phone:   | 75     | 00/99 | 0<br>30,351       |
| RMR | YELL | Geologic and Hydrothermal Studies of Yellowstone   | Hutchinson, Mr. R. A.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82190 Phone: | 0      | 00/99 | 0<br>0            |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$       |
|-----|------|---|--|--------|-------|--------------------|
| RMR | YELL | Effect of Forest Fire Size on Rocky Mountain Landbird Communities.                                      | Hutto, Mr. R. L.<br>University of Montana<br>Missoula, MT<br>59801 Phone:  | 50     | 00/99 | 0<br>24,000        |
| RMR | YELL | Finger printing obsidian flows and correlation with archeological specimens.                            | Johnson, Dr. A.<br>Rocky Mountain Region-NPS   | 15     | 00/99 | 500<br>0           |
| RMR | YELL | Fishery and Aquatic Management Program in Yellowstone National Park                                     | Jones, Mr. R. D.<br>U.S. Fish & Wildlife Service   | 0      | 00/99 | 133,000<br>133,000 |
| RMR | YELL | Relationships among birds, willows, and native ungulates in and near northern Yellowstone National Park | Kadlec, Dr. J. A.<br>Utah State University<br>Dept. Fisheries & Wildlife<br>Logan, UT<br>84322 Phone:                            | 50     | 00/99 | 0<br>10,800        |
| RMR | YELL | The Factors that limit Elk populations in the Greater Yellowstone Ecosystem.                            | Kay, Mr. C. E.<br>Utah State University<br>Dept. Fisheries & Wildlife<br>Logan, UT<br>84322 Phone:                               | 90     | 00/99 | 0<br>14,700        |
| RMR | YELL | Multiphase fluid flow in geothermal and volcanic systems  | Kieffer, Ms. S. W.<br>Arizona State University<br>U.S. Geological Survey<br>Geology Department<br>Tempe, AZ<br>85287-1404 Phone: | 0      | 00/99 | 0<br>45,000        |
| RMR | YELL | Fetal loss in bison in the Yellowstone Northern Range Herd  | Kirkpatrick, Mr. J. F.<br>Eastern Montana College<br>Billings, MT<br>59101 Phone:  | 50     | 00/99 | 0<br>4,000         |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| RMR | YELL | The influence of hydrothermal activity on the biology and chemistry of lakes in Yellowstone National Park | Klump, J. V.<br>University of Wisconsin<br>Center for Great Lakes Studies<br>Milwaukee, WI | 50     | 00/99 | 0<br>35,000     |
| RMR | YELL | Firehole River Fisheries Investigations   | Koch, Mr. E. D.<br>Idaho State University<br>Pocatello, ID<br>83201 Phone:                 | 0      | 00/99 | 0<br>21,000     |
| RMR | YELL | Distribution of amphibians and reptiles in Yellowstone National Park                                      | Koch, Mr. E. D.<br>Idaho State University<br>Pocatello, ID<br>83201 Phone:                 | 0      | 00/99 | 0<br>0          |
| RMR | YELL | Bison Bone Density  | Kreutzer, L. A.  | 50     | 00/99 | 0               |
| RMR | YELL | Consequences of Fire on the Coupling of Terrestrial & Aquatic Ecosystems                                  | Lathrop, Mr. R. G.<br>Cook College/Rutgers University<br>Dept. of Environmental Resources  | 30     | 00/99 | 0<br>70,000     |
| RMR | YELL | The status, distribution and management of mountain goats in the Greater Yellowstone Ecosystem            | Laundre, Mr. J. W.<br>Idaho State University<br>Pocatello, ID<br>83201 Phone:              | 95     | 00/99 | 13,000<br>0     |
| RMR | YELL | Insect Response to the 1988 Fires in Yellowstone National Park  | Lavigne, Mr. R. J.<br>University of Wyoming<br>Laramie, WY<br>82070 Phone:                 | 60     | 00/99 | 9,619<br>10,171 |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| RMR | YELL | Operation of Borehole Tiltmeters in Yellowstone National Park  | Levine, J.<br>JILA-University of Colorado<br>Boulder, CO<br>80309 Phone:  | 50     | 00/99 | 0<br>140,000     |
| RMR | YELL | A study of Invertebrates of burned and unburned Lodgepole Pine and Sagebrush-grassland communities after the 1988 Yellowstone Fires. | Lowrie, Mr. D. C.<br>New Mexico Museum of Natrl. History  | 0      | 00/99 | 1,300<br>1,000   |
| RMR | YELL | Visitor Services Project, Yellowstone National Park  | Machlis, Dr. G. E.<br>University of Idaho<br>College of Forestry<br>Wildlife and Range Sciences<br>Moscow, ID<br>83843 Phone: | 0      | 00/99 | 12,500<br>0      |
| RMR | YELL | Bacterial Diversity of Thermophilic Anoxygenic Phototrophs   | Madigan, Dr. M. T.<br>Southern Illinois University<br>Carbondale, IL<br>62901 Phone:  | 50     | 00/99 | 0<br>7,000       |
| RMR | YELL | Aquatic Ecosystem analysis for Soda Butte Creek  | Mangum, Dr. F.<br>Brigham Young University<br>U.S. Fish & Wildlife Service<br>Provo, UT<br>84602 Phone:                       | 75     | 00/99 | 3,000<br>0       |
| RMR | YELL | Changes on Geomorphic Processes in the Snake River Following Impoundment of Jackson Lake and Potential Changes Due to 1988 Fires     | Marston, Mr. R. A.<br>University of Wyoming<br>Laramie, WY<br>82070 Phone:  | 33     | 00/99 | 28,000<br>10,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| RMR | YELL | Boundary Area Restoration  | Maskarinec, Mr. G.<br>Wild Seed, Inc  | 0      | 00/99 | 3,500<br>0    |
| RMR | YELL | Study of Carex, sedge (Cyperaceae)   | Mastrogiuseppe, Ms. J.<br>Washington State University<br>Ownbey Herbarium<br>Pullman, WA<br>99163 Phone:      | 50     | 00/99 | 0<br>0        |
| RMR | YELL | Molecular investigation of the origin of the polyploid species, <i>Castilleja crista-galli</i> . | Mathews, Ms. S.<br>Montana State University<br>Department of Biology<br>Bozeman, MT<br>59717 Phone:           | 0      | 00/99 | 0<br>350      |
| RMR | YELL | Survey of Backcountry Users Regarding Sightings of Grizzly Bears in the Greater Yellowstone Area | McDonald, Dr. L.<br>University of Wyoming<br>Laramie, WY<br>82070 Phone:                                      | 66     | 00/99 | 0<br>0        |
| RMR | YELL | Annual production, forage quality and utilization rate by elk and bison on the northern range.   | McNaughton, Mr. S. J.   | 80     | 00/99 | 79,044<br>0   |
| RMR | YELL | Bison Ecology  | Meagher, Ms. M.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82190 Phone: | 0      | 00/99 | 55,000<br>0   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$    |
|-----|------|---|--|--------|-------|------------------|
| RMR | YELL | Animal ecology- Bighorn sheep population recovery/dynamics  | Meagher, Ms. M.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82190 Phone:  | 0      | 00/99 | 0<br>0           |
| RMR | YELL | Remote sensing of vegetation recovery in grasslands after the 1988 fires.   | Merrill, Ms. E.  | 20     | 00/99 | 9,000<br>0       |
| RMR | YELL | Holocene and modern geomorphic response to wildfires and climate change in northeastern Yellowstone National Park | Meyer, G. A.<br>University of New Mexico<br>Department of Geology<br>Albuquerque, NM<br>87131 Phone:           | 20     | 00/99 | 0<br>14,000      |
| RMR | YELL | Studies of the effects of the 1988 wildfire on Yellowstone stream ecosystems                                      | Minshall, Dr. G. W.<br>Idaho State University<br>Dept. of Biological Sciences<br>Pocatello, ID<br>83201 Phone: | 20     | 00/99 | 32,000<br>20,000 |
| RMR | YELL | Surface Chemistry of Obsidian Cliff Rhyolite Glass  | Mogk, Mr. D. W.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:                                     | 50     | 00/99 | 0<br>0           |
| RMR | YELL | Yellowstone River Suspended Sediment and Turbidity Study  | Mohrman, J.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82190 Phone:      | 100    | 00/99 | 114,550<br>0     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| RMR | YELL | 1990 Yellowstone Park Post-fire Sediment Study                                      | Mohrman, Ms. J.<br>Yellowstone National Park<br>National Park Service<br>Yellowstone N.P., WY<br>82190 Phone: | 0      | 10/90 | 20,000<br>15,000 |
| RMR | YELL | The small mammal communities in the first year following the Fan Creek Fire in 1979 | Moore, R. E.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:                                       | 100    | 00/99 | 3,000<br>3,000   |
| RMR | YELL | Effects of fire on mosquito populations in Yellowstone National Park                | Nielsen, Mr. L. T.  | 5      | 00/99 | 0<br>0           |
| RMR | YELL | Fire impact studies, geochemical  | Norton, Mr. D. R.<br>U.S. Geological Survey   | 33     | 00/99 | 12,000<br>20,000 |
| RMR | YELL | Thermophilic/pathogenic amoebae from hot pools                                      | O'Dell, Dr. W. D.<br>University of Nebraska<br>Dept. of Biology<br>Omaha, NE                                  | 50     | 00/99 | 0<br>835         |
| RMR | YELL | Complementary Management Alternatives in the Greater Yellowstone Area               | Omi, Mr. P. N.<br>Colorado State University<br>Fort Collins, CO<br>80521 Phone:                               | 80     | 00/99 | 0<br>41,000      |
| RMR | YELL | Evaluations of habitat selection patterns in native cervidae: elk                   | Peek, Dr. J. M.<br>University of Idaho<br>Dept. of Fish and Wildlife Res.<br>Moscow, ID<br>83843 Phone:       | 0      | 00/99 | 25,000<br>10,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| RMR | YELL | Visitor Impact on Grizzly Bear Activity in Pelican Valley, Yellowstone National Park | Picton, Mr. H.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:                    | 100    | 00/89 | 0<br>0        |
| RMR | YELL | Determination of age structure in the Northern elk herd                              | Picton, Mr. H. D.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:                 | 30     | 00/99 | 0<br>27,279   |
| RMR | YELL | Recolonization of burned aspen groves by land mollusks                               | Pillmore, Ms. D. B.<br>University of Colorado<br>Boulder, CO                                 | 25     | 00/99 | 0<br>642      |
| RMR | YELL | Influence of organic and inorganic nutrients on blue-green algae in Hebgen Lake      | Priscu, J. C.<br>Montana State University<br>Dept. of Biology<br>Bozeman, MT<br>59717 Phone: | 70     | 00/99 | 0<br>300,000  |
| RMR | YELL | Glacial Geology at Yellowstone National Park   | Richmond, Mr. G. M.<br>U.S. Geological Survey  | 60     | 00/99 | 0<br>7,000    |
| RMR | YELL | Grizzly and Black Bear Nutrition   | Robbins, Mr. C. T.   | 10     | 00/99 | 0             |
| RMR | YELL | Yellowstone Lake: Patterns in Productivity   | Romme, Mr. W. H.<br>Fort Lewis College<br>Durango, CO<br>81301 Phone:                        | 95     | 00/99 | 0<br>3,000    |
| RMR | YELL | Fire and Landscape Dynamics in Yellowstone National Park                             | Romme, Mr. W. H.<br>Fort Lewis College<br>Durango, CO<br>81301 Phone:                        | 95     | 00/99 | 0<br>124,000  |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| RMR | YELL | Mountain Pine and Beetle Outbreaks: Effects on Forest Productivity and Fuels in Yellowstone National Park                   | Romme, Mr. W. H.<br>Fort Lewis College<br>Durango, CO<br>81301 Phone:   | 0      | 00/99 | 0<br>0        |
| RMR | YELL | Investigation of the Impact of Forest Fires on the Chemistry and Water Quality of Ground Water in Yellowstone National Park | Runnells, Dr. D. D.<br>University of Colorado<br>Dept. of Geological Sciences<br>Boulder, CO<br>80302 Phone:                | 20     | 00/99 | 23,318<br>0   |
| RMR | YELL | Thermophilic microorganisms for coal biosolubilization  | Runnion, Mr. K.<br>J.K. Research  | 100    | 00/99 | 0<br>50,000   |
| RMR | YELL | Appraisal of Tree, Shrub, and Forb Mortality  | Ryan, Mr. K. C.<br>U.S. Forest Service<br>Intermountain Fire Sciences Lab.<br>P.O. Box 8089<br>Missoula, MT<br>59807 Phone: | 25     | 00/99 | 0<br>1,662    |
| RMR | YELL | The Monarch Project   | Sakai, Mr. W.<br>Santa Monica College<br>L.A. County Natural Hist. Museum<br>Santa Monica, CA<br>90406 Phone:               | 0      | 00/99 | 0<br>0        |
| RMR | YELL | Dendrogeomorphology of debris flows on active alluvial fans, Yellowstone National Park, Wyoming                             | Schmitt, Mr. J. G.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:   | 80     | 00/99 | 0<br>36,890   |

Investigators Annual Report - 1989

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| RMR | YELL | Ecology, behavior, and conservation biology of Yellowstone pronghorn antelope  | Scott, Dr. M. D.<br>Yellowstone National Park<br>Research Division<br>Yellowstone N.P., WY<br>82190 Phone: | 25     | 00/99 | 33,000<br>0  |
| RMR | YELL | Did the 1988 Yellowstone fires affect the native soil's growing ability? A comparison of the growing ability in four types of grass. | Seelig, II, J. C.<br>Kalamazoo Mathematics/Science Ctr.  | 0      | 00/99 | 0<br>750     |
| RMR | YELL | Canada Goose Molting Area Surveys  | Serdiuk, Mr. L.<br>Wyoming Game & Fish Dept.   | 0      | 00/99 | 0<br>0       |
| RMR | YELL | Highway Revegetation in Yellowstone National Park  | Sheetz, Mr. J. G.<br>USDA-Soil Conservation Service<br>Plant Materials Center<br>Bridger, MT               | 50     | 00/99 | 0<br>25,000  |
| RMR | YELL | Effects of fire on Yellowstone Lake as revealed by recent and fossil diatoms   | Shero, Dr. B. R.<br>Medaille College<br>18 Agassiz Circle<br>Buffalo, NY<br>14214 Phone:                   | 25     | 00/99 | 0<br>2,500   |
| RMR | YELL | Geographic variation, isolation and evolution of Cutthroat trout   | Shiozawn, Mr. D. K.<br>Brigham Young University<br>Provo, UT<br>84602 Phone:                               | 75     | 00/99 | 0<br>35,000  |
| RMR | YELL | Research of fluoride effects in wildlife and vegetation  | Shupe, Dr. J. L.<br>Utah State University<br>Logan, UT   | 95     | 00/99 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| RMR | YELL | Pumice Fall Layers in Yellowstone National Park   | Sigurdsson, Dr. H.   | 50     | 00/99 | 0<br>30,000     |
| RMR | YELL | Geochemical Investigation of High Temperature Petroleum and Natural Gas from Yellowstone and Grand Teton National Parks | Simoneit, B. R.<br>Oregon State University<br>College of Oceanography<br>Petroleum Research Group<br>Corvallis, OR<br>97331 Phone: | 85     | 00/99 | 0<br>8,000      |
| RMR | YELL | Zircons and fluids: An experimental investigation with applications for radioactive waste disposal                      | Sinha, A. K.   | 60     | 00/99 | 0<br>0          |
| RMR | YELL | Content Analysis and evaluation: Local, Regional and National Coverage of the 1988 Yellowstone-area wildfires           | Smith, Mr. C.<br>Ohio State University<br>Columbus, OH<br>43210 Phone:   | 60     | 00/99 | 4,715<br>11,250 |
| RMR | YELL | Crustal Deformation and Earthquake Studies of Yellowstone   | Smith, Mr. R. B.<br>University of Utah<br>Dept. of Geology and Geophysics<br>Salt Lake City, UT<br>84112 Phone:                    | 33     | 00/99 | 0<br>0          |
| RMR | YELL | Marketing Yellowstone National Park after the fires of 1988.  | Snepenger, Mr. D. J.<br>Montana State University<br>College of Business<br>Bozeman, MT<br>59717 Phone:                             | 100    | 00/99 | 9,500<br>1,500  |



| Reg | Park | Project Title   | Investigator/Address/Phone  | X done | End   | MPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| RMR | YELL | Hydrophobicity of burned and unburned soils   | Sobey, Mr. G.<br>Keystone School<br>San Antonio, TX   | 15     | 00/99 | 0<br>0       |
| RMR | YELL | Distribution of thermoacidophilic bacteria in solfataric fields   | Stetter, Dr. K. O.<br>Universitat Regensburg<br>Lehrstuhl fur Mikrobiologie<br>Universitatsstr. 31, D-8400<br>Regensburg, F.R.G | 30     | 00/99 | 0<br>0       |
| RMR | YELL | Composition of plant communities initiating forest succession following wildfire                              | Stickney, Mr. P. F.<br>USDA Forest Service<br>Intermountain Research Station  | 40     | 00/99 | 0<br>1,600   |
| RMR | YELL | Thermophilic bacteria for the removal of sulfur and ash-forming mineral matter from coal.                     | Stoner, Dr. D. L.<br>Idaho National Engineering Lab.  | 10     | 00/99 | 0<br>150,000 |
| RMR | YELL | Isotopic Studies of Yellowstone thermal waters; Geochronology of Yellowstone hydrothermal systems by U-series | Sturchio, Mr. N. C.<br>Argonne National Laboratory  | 75     | 00/99 | 0<br>100,000 |
| RMR | YELL | Gypsy Moth Detection  | Sweaney, Mr. J.<br>Yellowstone National Park<br>Yellowstone N.P., WY<br>82190 Phone:  | 0      | 00/99 | 0<br>0       |
| RMR | YELL | A study of the Mushroom Flora of Yellowstone National Park for Comparison with Sierra Nevada                  | Thiers, Mr. H. D.<br>San Francisco State University<br>San Francisco, CA<br>94122 Phone:  | 0      | 00/99 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| RMR | YELL | Spatial heterogeneity of burn severity and first-year vegetation responses following fire on Yellowstone's subalpine plateaus | Turner, Ms. M. G.<br>Oak Ridge National Laboratory<br>Environmental Sciences Division                         | 70     | 00/99 | 0<br>0        |
| RMR | YELL | Correlation of Cretaceous strata in Southwestern Montana  | Tysdal, Mr. R. G.<br>U.S. Geological Survey   | 100    | 00/99 | 0<br>100      |
| RMR | YELL | Antler characteristics of Northern Yellowstone Elk during 1988  | Vales, Mr. D. J.<br>University of Idaho<br>Moscow, ID<br>83843 Phone:   | 0      | 00/99 | 1,000<br>900  |
| RMR | YELL | Monitor Stromatolite Growth Rates and Inclinations  | Vanyo, J. P.<br>University of California<br>Santa Barbara, CA<br>93106 Phone:                                 | 50     | 00/99 | 0<br>4,500    |
| RMR | YELL | Water Quality changes in Yellowstone National Park associated with the fires of 1988.   | Vertucci, Dr. F. A.<br>Colorado State University<br>Department of Biology<br>Fort Collins, CO<br>80521 Phone: | 70     | 00/99 | 0<br>10,000   |
| RMR | YELL | Feasibility of DNA Fingerprinting Grizzly Bears   | Vyse, Mr. E. R.<br>Montana State University<br>Biology Dept.<br>Bozeman, MT<br>59717 Phone:                   | 100    | 00/99 | 500<br>600    |
| RMR | YELL | The interaction of fire and grazing on plant growth and community structure   | Wallace, Ms. L. L.<br>University of Oklahoma<br>Norman, OK<br>73069 Phone:                                    | 35     | 00/99 | 22,000<br>0   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|--|--|--------|-------|----------------|
| RMR | YELL | Response of Major Forage Species to Grazing by Bison and Elk                                   | Wallace, Ms. L. L.<br>University of Oklahoma<br>Nolrman, OK<br>73069 Phone:                            | 0      | 00/99 | 66,000<br>0    |
| RMR | YELL | Determining Wolf Predation on Elk and Moose Through Scat Analysis                              | Weaver, Mr. J.   | 45     | 00/99 | 7,500<br>2,500 |
| RMR | YELL | Eruption History of the Sepulcher Formation as Determined by Geochemistry                      | Webster, Jr., Dr. C. L.<br>Loma Linda University<br>Loma Linda, CA<br>92354 Phone:                     | 70     | 00/99 | 0<br>9,500     |
| RMR | YELL | Gibbon/Madison Mudslide Hazard Reconnaissance  | Wells, II, Mr. W. G.<br>USDA Forest Service<br>Pacific Southwest Forest and Range Experimental Station | 90     | 00/99 | 0<br>0         |
| RMR | YELL | Yellowstone Flora  | Whipple, Ms. J.  | 5      | 00/99 | 0              |
| RMR | YELL | Thermal features of Yellowstone National Park  | White, Mr. D. E.<br>U.S. Geological Survey   | 0      | 00/99 | 0<br>0         |
| RMR | YELL | Meiofauna of Lake Yellowstone beach sands  | Whitman, Mr. R.<br>Indiana Dunes National Lakeshore  | 0      | 00/99 | 0<br>0         |
| RMR | YELL | Comparison of aquatic insects in stream areas of differing physical and chemical measurements. | Winternitz, B. L.<br>Colorado College<br>Colorado Springs, CO<br>80903 Phone:                          | 10     | 00/99 | 0<br>800       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| RMR | YELL | Turbidimetric Determination of Sulfates  | Wittek, E.<br>Montana State University<br>Bozeman, MT<br>59717 Phone:  | 100    | 00/99 | 0<br>0        |
| RMR | YELL | Unique microbial enzyme systems  | Wolfram, J. H.   | 15     | 00/99 | 0             |
| RMR | YELL | Ecological studies on parasites of the<br>Gibbon Elk Herd  | Worley, Mr. D. E.<br>Montana State University<br>Veterinary Research Lab.<br>Bozeman, MT<br>59717 Phone:               | 0      | 00/99 | 0<br>0        |
| RMR | YELL | Respiratory physiology and diving<br>performance in two species of water<br>scavenger beetles (Coleoptera:<br>Hydrophilidae) | Ybarrondo, Mr. B. A.<br>University of Vermont<br>Department of Zoology<br>Burlington, VT<br>05401 Phone:               | 40     | 00/99 | 0<br>5,900    |
| RMR | YELL | Radar Forest Ecology of Burned Areas.  | Zebker, Mr. H. A.<br>Jet Propulsion Laboratory   | 20     | 00/99 | 0<br>10,000   |
| RMR | YELL | Ecology and Physiology of Novel Aerobic and<br>Anaerobic Bacteria from Extreme Environments                                  | Zeikus, Mr. J. G.<br>Michigan State University<br>Michigan Biotechnology Institute<br>East Lansing, MI<br>48823 Phone: | 25     | 00/99 | 0<br>0        |
| RMR | ZION | Quantification of Federal reserved water<br>rights   | Anderson, Ms. A.<br>NPS-Rocky Mountain Region<br>P.O. Box 25287<br>Denver, CO<br>80025 Phone: (303)969-2875            | 40     | 09/91 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| RMR | ZION | Effects of Air Pollution on Cryptogamic Crusts                             | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164  | 90     | 11/90 | 20,000<br>0      |
| RMR | ZION | Quantification of Federal reserved water rights                            | Boyle, Dr. T. P.<br>NPS-Water Resources Division<br>Colorado State University<br>301 S. Howes Street, Room 353<br>Ft. Collins, CO<br>80521 Phone: (303)491-1452 | 95     | 09/90 | 0<br>0           |
| RMR | ZION | The Influence of Pinyon Pine Hybrid Zones on Herbivorous Insect Abundances | Christensen, Ms. K.<br>Northern Arizona University<br>Department of Biological Sciences<br>P.O. Box 5640<br>Flagstaff, AZ<br>86011-5640 Phone:                  | 30     | 01/92 | 0<br>200,000     |
| RMR | ZION | Habitat Preference of the Virgin River Spinedace                           | Deacon, Mr. J. E.<br>University of Nevada<br>Department of Biological Sciences<br>Las Vegas, NV   | 80     | 01/90 | 13,000<br>0      |
| RMR | ZION | Vegetation Communities of Zion National Park (Phase III)                   | Harper, Ms. K. T.<br>Brigham Young University<br>Dept. of Botany & Range Sciences<br>Provo, UT<br>84602 Phone:  | 85     | 05/90 | 14,000<br>17,000 |

| Reg | Park | Project Title                                     | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| RMR | ZION | Quantification of Federal reserved water rights   | Johns, Ms. A. E.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8304 | 60     | 07/91 | 0<br>0        |
| RMR | ZION | Quantification of Federal reserved water rights   | Taylor, Dr. D. W.<br>Biosystems Analysis, Inc.<br>303 Portrero Street, Ste. 29-203<br>Santa Cruz, CA<br>95060 Phone:             | 70     | 07/91 | 4,100<br>0    |
| RMR | ZION | Threatened and Endangered and Exotic Plant Survey | Welsh, Dr. S. L.<br>Endangered Plant Studies, Inc.<br>129 N. 1000 E.<br>Orem, UT<br>84057 Phone:                                 | 90     | 11/91 | 6,000<br>0    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| SER | BICY | Comparison of restoration methods for oil development sites                             | Best, Dr. G. R.<br>University of Florida<br>Center for Wetlands<br>Gainesville, FL<br>32611 Phone: (904)392-2424   | 50     | 09/91 | 40<br>2         |
| SER | BICY | Distribution and Habitat use of the Big Cypress Fox Squirrel                            | Humphrey, Dr. S. R.<br>University of Florida<br>Florida Museum of Natural History<br>Gainesville, FL<br>32611 Phone: (904)392-1721                         | 70     | 03/91 | 15,000<br>1,000 |
| SER | BICY | Ecology and population dynamics of the Florida Panther in Big Cypress National Preserve | Jansen, Ms. D. K.<br>National Park Service<br>Big Cypress National Preserve<br>S. R. Box 110<br>Ochopee, FL<br>33943 Phone: (813)695-2000                  | 40     | 09/91 | 60,000<br>0     |
| SER | BICY | Population dynamics of white-tailed deer in the Big Cypress National Preserve           | Labisky, Dr. R. F.<br>University of Florida<br>Newins-Ziegler Hall<br>Dept. of Wildlife and Range Science<br>Gainesville, FL<br>32611 Phone: (904)392-4851 | 35     | 03/92 | 100,000<br>0    |
| SER | BICY | The use of fire in the control of melaleuca   | Myers, Dr. R. L.<br>The Nature Conservancy<br>Route 1, Box 678<br>Tallahassee, FL<br>32312 Phone: (904)893-4153  | 45     | 04/91 | 2,000<br>20,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|--|--|--------|-------|----------------|
| SER | BICY | Wading bird survey   | Schortemeyer, Mr. J. L.<br>Florida Game and Fish Commission<br>566 Commercial Blvd.<br>Naples, FL<br>33942 Phone: (813)643-4220          | 90     | 09/90 | 6,000<br>5,000 |
| SER | BICY | Effect of season of burning on prairie plant flowering                         | Snyder, Dr. J. R.<br>National Park Service<br>Big Cypress National Preserve<br>S.R. Box 110<br>Ochopee, FL<br>33943 Phone: (813)695-2000 | 95     | 06/89 | 5,000<br>0     |
| SER | BICY | Effect of season of burning on resprouting of hardwood shrubs                  | Snyder, Dr. J. R.<br>National Park Service<br>Big Cypress National Preserve<br>S.R. Box 110<br>Ochopee, FL<br>33943 Phone: (813)695-2000 | 80     | 06/90 | 5,000<br>0     |
| SER | BICY | Survey of rare and endangered vascular-plants in Big Cypress National Preserve | Snyder, Dr. J. R.<br>National Park Service<br>Big Cypress National Preserve<br>S.R. Box 110<br>Ochopee, FL<br>33943 Phone: (813)695-2000 | 50     | 09/90 | 25,000<br>0    |
| SER | BICY | Effect of fire on the reproductive biology of <i>Jacquemontia curtisii</i>     | Spier, Ms. L. P.<br>National Park Service<br>Big Cypress National Preserve<br>S.R. Box 110<br>Ochopee, FL<br>33943 Phone: (813)695-2000  | 50     | 09/90 | 8,000<br>0     |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| SER | BISC | Visual Fish Census at Biscayne Nat'l Park   | Bohnsack, Dr. J.<br>Southeast Fisheries Center<br>75 Virginia Beach Dr.<br>Miami, FL<br>33149 Phone: (305)361-4252                              | 30     | 09/93 | 10,000<br>0  |
| SER | BISC | Population structure of gorgonian soft corals   | Coffroth, Dr. M.<br>State University of New York<br>Dept. of Biological Sciences<br>SUNY @ Buffalo<br>Buffalo, NY<br>14260 Phone: (716)636-2881 | 10     | 12/93 | 0<br>5,000   |
| SER | BISC | Effects of Salinity Upon the Leaf Morphology and Leaf Growth Rate of the Dwarf Form of the Red Mangrove ( <i>Rhizophora mangle</i> ) in Southern Florida. | Cole, Mr. C. A.<br>University of Miami<br>19 Monastery Rd.<br>Brighton, MA<br>02135 Phone: (617)787-0138  | 100    | 06/89 | 0<br>1,500   |
| SER | BISC | Speciation in <i>Hypoplectrus</i>   | Domeier, Mr. M. L.<br>University of Miami/RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)661-2156                        | 40     | 12/91 | 0<br>3,600   |
| SER | BISC | Population Monitoring of the Scchaus Swallowtail Butterfly Population   | Emmel, Dr. T. C.<br>University of Florida<br>Department of Zoology<br>1717 N.W. 45th Ave<br>Gainesville, FL<br>32605 Phone:                     | 0      | 12/89 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| SER | BISC | The Role of Steroids in the Reproduction of Favia Fragum | Gassman, Ms. N. J.<br>University of Miami, MBF/RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)361-4642            | 40     | 12/90 | 0<br>2,000     |
| SER | BISC | Evaluation of growth rates and predation on corals       | Glynn, Dr. P. W.<br>University of Miami, RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone:                                | 0      | 12/89 | 0<br>0         |
| SER | BISC | Environmental Contamination of Coral Reef Areas          | Jaap, Mr. W. C.<br>Florida Dept. of Natural Resources<br>100 Eighth Avenue Southeast<br>St. Petersburg, FL<br>33701 Phone: (813)896-8626 | 100    | 07/89 | 0<br>30,000    |
| SER | BISC | Plant Identification                                     | Jackson, Dr. J. R.<br>Missouri Southern State<br>719 W. 3rd Street<br>Joplin, MO<br>64801 Phone:   | 0      | 12/89 | 0<br>0         |
| SER | BISC | Tropical Fish Collection                                 | Johnson, Mr. C.<br>Biscayne National Park<br>P.O. Box 1369<br>Homestead, FL<br>33030 Phone: (305)247-2044                                | 100    | 12/89 | 500<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| SER | BISC | Algal Collection  | Kappes, Mr. J.<br>Miami Southridge Sr. High School<br>8005 S.W. 199 Terrace<br>Cutler Ridge, FL<br>33189 Phone: (305) -   | 0      | 12/89 | 0<br>500     |
| SER | BISC | Regional Groundwater Nutrient Transport                                 | Lapoint, Dr. B. E.<br>International Marine Research<br>Rt 3, Box 297A<br>Big Pine Key, FL   | 0      | 12/89 | 0<br>0       |
| SER | BISC | Primary Ichthyofaunal Nursery Habitats of Southeast Biscayne Bay        | Lindeman, Mr. K. C.<br>University of Miami - RSMAS<br>Div. of Marine Biology & Fisheries<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)361-4195 | 80     | 08/90 | 0<br>150     |
| SER | BISC | Does male sterility lead to outcrossing in <i>Rhizophora mangle</i> L.? | Lowenfeld, R. C.<br>University of Massachusetts<br>Dept. of Botany<br>Amherst, MA<br>01003 Phone: (413)545-0524   | 25     | 01/91 | 0<br>1,000   |
| SER | BISC | Occurrence of crocodilians in Biscayne National Park                    | Mazzotti, Dr. F. J.<br>University of Florida<br>3245 College Ave.<br>Davie, FL<br>33314 Phone: (305)370-3725  | 30     | 12/91 | 0<br>500     |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| SER | BISC | Developmental Physiology of CASSIOPEA<br>XAMACHANA           | Meier, Ms. O. W.<br>University of Georgia<br>Department of Zoology<br>724 Biological Sciences Building<br>Athens, GA<br>30602 Phone:                   | 0      | 12/89 | 0<br>0        |
| SER | BISC | Determinants of Social Organization among<br>Fishes          | Myrberg, Dr. A. A.<br>University of Miami, RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149-1098 Phone: (305)361-4141                         | 40     | 12/89 | 0<br>40,000   |
| SER | BISC | Long Term Coral Reef Monitoring at Biscayne<br>National Park | Porter, Dr. J.<br>University of Georgia<br>Athens, GA  | 50     | 12/93 | 43,032<br>0   |
| SER | BISC | Hard Coral Predation   | Potts, Dr. D. C.<br>University of California<br>Center for Coastal Marine Studies<br>2373 Applied Sciences Building<br>Santa Cruse, CA<br>95064 Phone: | 0      | 12/89 | 0<br>0        |
| SER | BISC | Damselfish neurofibromatosis as a model of<br>human NF.      | Schmale, Dr. M. C.<br>University of Miami, RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)361-4140                              | 70     | 03/92 | 0<br>150,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| SER | BISC | Behavioral and Neural Response of Larval Spiny Lobsters to Food Extracts                                   | Shell, T. B.<br>University of Miami<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)445-5410           | 25     | 12/92 | 0<br>11,600  |
| SER | BISC | Coral Reef Chronology  | Shinn, Dr. E. A.<br>U.S. Geological Survey<br>Fisher Island Station<br>Miami Beach, FL<br>33138 Phone:                 | 0      | 12/89 | 0<br>0       |
| SER | BISC | Ecophysiology of mangroves: water utilization.   | Sternberg, Dr. D. O.<br>University of Miami<br>Department of Biology<br>Coral Gables, FL<br>33124 Phone: (305)284-6436 | 5      | 12/92 | 0<br>243,000 |
| SER | BISC | A. Control of skeletal banding in reef corals<br>B. Coral skeletons as a source of nutrients for the coral | Szmant, Ms. A. M.<br>University of Miami<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305)361-4609      | 20     | 12/91 | 0<br>40,000  |
| SER | BISC | Cryptofaunal and Sediment Collection   | Tedesco, Ms. L.<br>University of Miami, RSMAS<br>4600 Rickenbacker Causeway<br>Miami, FL<br>33149 Phone: (305) -       | 0      | 12/89 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | BISC | Incidental Collections   | Valentine, Mr. W. H.<br>Biscayne National Park<br>9700 S.W. 328th Street<br>Homestead, FL<br>33090 Phone: (305)247-2044                               | 100    | 12/89 | 50<br>0       |
| SER | BISC | THALASSIA AND TURBIDITY: A Continuing Study<br>of the Turtle-Grass of Biscayne Bay | Van Eck, Ms. S. H.<br>National Park Service<br>19900 Holiday Rd.<br>Miami, FL<br>33157 Phone: (305)251-7165   | 100    | 12/89 | 0<br>20       |
| SER | BISO | Mussel Reproduction  | Anderson, Mr. R.<br>Tennessee Tech University<br>U.S. Fish & Wildlife Service<br>Co-op Fisheries Unit<br>Cookeville, TN<br>38502 Phone: (615)372-3094 | 10     | 12/90 | 0<br>10,000   |
| SER | BISO | Mussel Survey  | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025   | 95     | 12/90 | 0<br>16,500   |
| SER | BISO | Landfill Study   | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025   | 40     | 12/89 | 5,000<br>0    |

| Reg | Park | Project Title                         | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$   |
|-----|------|---------------------------------------|---|--------|-------|-----------------|
| SER | BISO | Bear Creek Study                      | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 80     | 10/90 | 1,000<br>0      |
| SER | BISO | Duck Box Project                      | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 90     | 07/90 | 1,000<br>0      |
| SER | BISO | Gypsy Moth Survey                     | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 0      | 00/99 | 1,000<br>0      |
| SER | BISO | Hazardous Waste Investigation at Obed | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 90     | 10/90 | 1,000<br>20,000 |
| SER | BISO | Obed Mussel Survey                    | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 10     | 06/92 | 1,000<br>0      |

| Reg | Park | Project Title                          | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|--|--|--------|-------|-----------------|
| SER | BISO | Weather Monitoring                     | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025      | 0      | 00/99 | 500<br>0        |
| SER | BISO | Twin Arches Vegetation Survey          | Bakaletz, Mr. S.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025      | 80     | 07/90 | 1,000<br>0      |
| SER | BISO | Land Snail Survey                      | Caldwell, Dr. R.<br>Lincoln Memorial University<br>Harrogate, TN<br>37752 Phone: (615)869-3611               | 70     | 04/91 | 2,000<br>20,000 |
| SER | BISO | Archeological Sites Monitoring Program | Des Jean, Mr. T.<br>National Park Service<br>Route 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025    | 100    | 05/89 | 0<br>50,000     |
| SER | BISO | Summer Public Archeology Program       | Des Jean, Mr. T. P.<br>National Park Service<br>Route 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025 | 95     | 06/90 | 1,000<br>0      |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|---|--|--------|-------|-----------------|
| SER | BISO | A History of Southern Clay Manufacturing Company at Robbins, Tennessee. | Des Jean, Mr. T.<br>National Park Service<br>Big South Fork NRRRA<br>Oneida, TN<br>Phone: (615)569-6025        | 90     | 06/90 | 321<br>0        |
| SER | BISO | River Management Plan   | Hammitt, Dr. W.<br>University of Tennessee<br>Dept. of Forestry<br>Knoxville, TN<br>37916 Phone: (615)974-7126 | 70     | 12/92 | 1,000<br>0      |
| SER | BISO | Black Bear Habitat Suitability Study                                    | Pelton, Dr. M.<br>University of Tennessee<br>Knoxville, TN<br>37916 Phone: (615)974-7126                       | 60     | 06/92 | 5,000<br>20,000 |
| SER | BISO | Mussel Habitat Suitability Study  | Richardson, Mr. J.<br>Tenn. Tech. University<br>Center of Excellence<br>Cookeville, TN<br>38501 Phone:         | 100    | 01/90 | 0<br>20,000     |
| SER | BISO | Kentucky Botanical Survey   | Risk, Dr. A.<br>KY Nature Preserves Commission<br>407 Broadway<br>Frankfort, KY<br>40601 Phone: (502)564-2886  | 80     | 03/90 | 1,000<br>9,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| SER | BISO | Biso Water Quality Monitoring Project                | Spradlin, Ms. E.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025  | 0      | 00/99 | 13,000<br>0   |
| SER | BISO | Cemetery Inventory                                   | Spradlin, Ms. E.<br>National Park Service<br>Rt. 3, Box 401<br>Oneida, TN<br>37841 Phone: (615)569-6025  | 95     | 12/90 | 2,000<br>0    |
| SER | BISO | Oil and Gas Survey                                   | Vaculick, Ms. L.<br>National Park Service<br>Denver Service Center<br>Denver, CO   | 80     | 06/91 | 50,000<br>0   |
| SER | BLRI | Vaccinium and Rubrus breeding and genetics           | Ballington, Dr. J. R.<br>North Carolina State University<br>Dept. of Horticultural Science<br>Box 7609<br>Raleigh, NC<br>27695-7609 Phone: (919)737-3166 | 0      | 00/99 | 0<br>1,000    |
| SER | BLRI | Crustacean distribution in the southern Appalachians | Biernbaum, Mr. C. K.<br>College of Charleston<br>Grice Marine Biological Laboratory<br>205 Ft. Johnson<br>Charleston, SC<br>29412 Phone: (803)795-3716   | 5      | 12/95 | 0<br>200      |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| SER | BLRI | A study of the ecology of the northern flying squirrel  | Boynton, Mr. A. C.<br>N.C. Wildlife Resources Comm<br>209 Ervin Road<br>Morganton, NC<br>28655 Phone: (704)433-8669                        | 80     | 06/91 | 0<br>6,250   |
| SER | BLRI | A comparative study between two techniques of estimating fish habitat and populations in southern Appalachian headwater streams | Dolloff, Dr. C. A.<br>VA Tech. & State University<br>U.S. Forest Service<br>138 Cheatham Hall<br>Blacksburg, VA<br>24061-0321 Phone:       | 70     | 06/90 | 4,000<br>500 |
| SER | BLRI | Chemical ecology of swallowtail butterflies   | Feeny, Dr. P. P.<br>Cornell University<br>Dept. of Ecology and Systematics<br>Corson Hall<br>Ithaca, NY<br>14853-2701 Phone: (607)255-3093 | 33     | 03/92 | 0<br>152,000 |
| SER | BLRI | Structural, stratigraphic, and petrologic dissimilarities across the Hayesville Fault in western North Carolina.                | Hatcher, Jr., Dr. R. D.<br>University of Tennessee<br>Dept. of Geological Sciences<br>Knoxville, TN<br>37996-1410 Phone: (615)974-6565     | 50     | 12/90 | 0<br>5,000   |
| SER | BLRI | Lichenological study on the Blue Ridge Parkway in North Carolina  | Heiman, Ms. K.<br>Consulting Biologist<br>130 Beverly Avenue<br>Hendersonville, NC<br>28739 Phone:   | 50     | 06/90 | 300<br>350   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | BLRI | Status of Anthophylax hoffmani (Beut.) and other Coleoptera: Cerambycidae on the Blue Ridge Parkway              | Huether, Dr. J. P.<br>Cornell University<br>c/o N.Y.S.A.E.S<br>Department of Entomology<br>Geneva, NY<br>14456 Phone: (315)789-0645 | 50     | 12/92 | 0<br>900      |
| SER | BLRI | Effects of acid precipitation on salamanders   | Ireland, Dr. P. H.<br>Radford University<br>Radford, VA<br>24142 Phone: (703)831-5642   | 50     | 09/92 | 0<br>4,000    |
| SER | BLRI | Geochemical and isotopic study of igneous rocks--southwestern Blue Ridge Parkway                                 | Kish, Dr. S. A.<br>Florida State University<br>Dept of Geology B-160<br>Tallahassee, FL<br>32306 Phone: (904)644-2064               | 25     | 12/91 | 0<br>0        |
| SER | BLRI | Distribution and status of the endemic Peaks of Otter salamander (Plethodon hubrichti) on the Blue Ridge Parkway | Mitchell, Dr. J. C.<br>University of Richmond<br>Department of Biology<br>Richmond, VA<br>23173 Phone: (804)289-8234                | 75     | 12/90 | 600<br>0      |
| SER | BLRI | Distribution and status of the endangered bog turtle   | Mitchell, Dr. J. C.<br>University of Richmond<br>Department of Biology<br>Richmond, VA<br>23173 Phone: (804)289-8234                | 80     | 12/90 | 500<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| SER | BLRI | Snake salvaging project on the Blue Ridge Parkway in Virginia   | Mitchell, Dr. J. C.<br>University of Richmond<br>Department of Biology<br>Richmond, VA<br>23173 Phone: (804)289-8234                                     | 0      | 00/99 | 0<br>800      |
| SER | BLRI | Conglomerate deposits of the Grandfather Mountain formation (late Proterozoic): Insight into rifting of the Grenville continent | Neton, Mr. M. J.<br>University of Tennessee<br>Department of Geological Sciences<br>306 G&G Building<br>Knoxville, TN<br>37996-1410 Phone: (615)974-2366 | 20     | 12/90 | 0<br>800      |
| SER | BLRI | Soil survey for the Peaks of Otter, Blue Ridge Parkway  | Nicholson, Mr. J.<br>U.S. Soil Conservation Service<br>Room 9201, Federal Building<br>400 North Eighth Street<br>Richmond, VA<br>23240 Phone:            | 75     | 12/90 | 3,000<br>0    |
| SER | BLRI | Comparative isozyme studies of Botrychium simplex   | Pittillo, Dr. J. D.<br>Western Carolina University<br>Dept of Biology<br>Cullowhee, NC<br>28723 Phone: (704)227-7244                                     | 20     | 05/91 | 0<br>0        |
| SER | BLRI | Evolution of ethological and postmating isolation in salamanders of the genus Plethodon   | Reagan, Ms. N. L.<br>University of Chicago<br>Ecology and Evolution<br>940 E. 57th Street<br>Chicago, IL<br>60637 Phone: (312)702-6001                   | 85     | 10/90 | 0<br>17,850   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | BLRI | Geological structure of the Blue Ridge in central Virginia   | Spencer, Mr. E.<br>Washington and Lee University<br>Geology Department<br>Lexington, VA<br>24450 Phone: ( ) -   | 20     | 00/99 | 0<br>0        |
| SER | BLRI | Studies on plethodontid salamanders  | Thurow, Dr. G. R.<br>Western Illinois University<br>Dept. of Biological Sciences<br>Macomb, IL<br>61455 Phone: (309)298-1595                          | 80     | 11/91 | 0<br>2,500    |
| SER | BLRI | Kinematic analysis and petrology of ductile shear zones northwest of the Grandfather Mountain window, western North Carolina       | Trupe, Mr. C. H.<br>University of North Carolina<br>Dept. of Geology<br>CB #3315, Mitchell Hall<br>Chapel Hill, NC<br>27599-3315 Phone: (919)966-4516 | 60     | 12/91 | 0<br>960      |
| SER | BLRI | The evolution of ethological and post-mating isolation of salamanders  | Verrell, Mr. P. A.<br>University of Chicago<br>Dept. of Ecology and Evolution<br>940 East 57th Street<br>Chicago, IL<br>60637 Phone: (312)702-6001    | 15     | 07/92 | 0<br>98,963   |
| SER | BLRI | Survey of <i>Liatris helleri</i> on Blue Ridge Parkway lands from milepost 299 to 306 (Watauga and Avery Counties, North Carolina) | Wear, Ms. D.<br>Appalachian State University<br>Department of Biology<br>Boone, NC  | 100    | 03/89 | 1,500<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| SER | BLRI | Survey of rare and endangered vertebrates of the Blue Ridge Parkway in North Carolina  | Weigl, Dr. P. D.<br>Wake Forest University<br>Department of Biology<br>Winston-Salem, NC<br>27109 Phone: (919)759-5323               | 100    | 07/89 | 20,000<br>0   |
| SER | BLRI | A study of trail users and their impact on the Tanawha Trail   | Williams, Dr. W.<br>Appalachian State University<br>Department of HLES<br>Boone, NC<br>28608 Phone: (704)262-6335                    | 80     | 02/90 | 665<br>600    |
| SER | BLRI | Patterns in vegetation and plant adaptations in widely disjunct species assemblages  | Wiser, Ms. S.<br>University of North Carolina<br>Department of Biology<br>CB #3280<br>Chapel Hill, NC<br>Phone: (000)000-0000        | 25     | 05/92 | 0<br>4,000    |
| SER | BUIS | Quantitative Assessment of Selected Components of the Coral Reef Ecosystem and Establishment of Long-term Monitoring Sites at Buck Island Reef National Monument, St. Croix, USVI. | Gladfelter, Ms. E.<br>West Indies Laboratory<br>St. Croix, US/VI<br>Phone: (809)773-9339   | 50     | 06/91 | 40,000<br>0   |
| SER | BUIS | Buck Island Reef NM Hawksbill Sea Turtle Research Program  | Hillis, Ms. Z.<br>National Park Service<br>Buck Island Reef NM<br>P.O. Box 160<br>St. Croix, USVI<br>00821-0160 Phone: (809)773-1460 | 100    | 12/89 | 13,735<br>0   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| SER | BUIS | A Study of the Geologic Record of the Reefs on Buck Island   | Hubbard, Dr. D.<br>West Indies Laboratory<br>St. Croix, USVI<br>Phone: (809)773-9266   | 75     | 12/90 | 31,500<br>0     |
| SER | CAHA | Management of shrub communities  | Bratton, Dr. S. P.<br>University of Georgia<br>National Park Service<br>Institute of Ecology<br>Athens, GA<br>30602 Phone: (404)542-2968             | 85     | 08/91 | 15,000<br>0     |
| SER | CAHA | Water Quality Monitoring on Bodie Island/Buxton Woods, CAHA  | Cole, Dr. C. A.<br>North Carolina State University<br>P.O. Box 8004<br>Raleigh, NC<br>27695-8004 Phone: (919)737-3601                                | 20     | 10/93 | 40,000<br>0     |
| SER | CAHA | Buxton Woods Freshwater Wetlands: Interrelationships among Vegetation, Hydrology and Water Chemistry | Ehrenfeld, Dr. J. G.<br>Rutgers University<br>Center for Coastal & Env. Studies<br>Doolittle Hall<br>New Brunswick, NJ<br>08903 Phone: (201)932-3609 | 50     | 08/90 | 0<br>5,000      |
| SER | CAHA | A Survey of Piping Plovers at Cape Hatteras and Cape Lookout National Seashores                      | Fraser, Dr. J. D.<br>VA Tech. & State University<br>Blacksburg, VA<br>24061 Phone: (703)231-6064   | 100    | 01/90 | 19,500<br>6,500 |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| SER | CAHA | Gypsy Moth Detection Survey   | Leonard, Ms. D. S.<br>U.S. Forest Service<br>200 Weaver Boulevard<br>P.O. Box 2680<br>Asheville, NC<br>28802 Phone: (704)257-4329                  | 70     | 10/95 | 0<br>500      |
| SER | CAHA | Benthic Macroinvertebrates of Seven Ponds at Cape Hatteras National Seashore                      | MacPherson, Ms. P. F.<br>NC Division of Environmental Mgmt.<br>P.O. Box 27667<br>Raleigh, NC<br>27611 Phone: (919)733-6946                         | 25     | 12/90 | 0<br>4,000    |
| SER | CAHA | An evaluation of changes in the avian and mammalian faunas of the Cape Hatteras National Seashore | Parnell, Dr. J. F.<br>University of North Carolina-Wilmn.<br>Route 3, Box 303-5<br>Wilmington, NC<br>28403 Phone: (919)395-3477                    | 100    | 06/89 | 16,000<br>0   |
| SER | CAHA | Baseline Floral Survey, Cape Hatteras National Seashore   | Stalter, Dr. R.<br>St. John's University<br>Department of Biology<br>Grand Central and Utopia Parkways<br>Jamaica, NY<br>1439 Phone: (718)990-6161 | 20     | 09/94 | 0<br>1,000    |
| SER | CALO | Piping Plover Distribution and Reproductive Success on Cape Lookout National Seashore             | Fraser, Mr. J. D.<br>VA Tech. & State University<br>Dept. of Fisheries and Wildlife<br>Blacksburg, VA<br>24061 Phone: (703)231-6064                | 100    | 03/90 | 19,500<br>0   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| SER | CALO | Sea Turtle Monitoring Program, 1989 Annual Report, Cape Lookout National Seashore   | Rikard, Dr. M. W.<br>National Park Service<br>415 Front Street<br>Beaufort, NC<br>28516 Phone: (919)728-2250  | 100    | 12/89 | 10,000<br>0     |
| SER | CANA | Biological Assessment for Effects of Constructing Railroad and Road Corridors Through Habitat of Florida Scrub Jay and Eastern Indigo Snake | Breininger, D. R.<br>The Bionetics Corporation<br>Mail Code BIO-2<br>NASA, Biomedical Operat & Research<br>JFK Space Center, FL<br>32899 Phone: (407)853-3281 | 100    | 07/31 | 10,000<br>0     |
| SER | CANA | Yeast Species Associated with Decaying Prickly Pear Cactus, Opuntia stricta And O. humifusa in the Area of Cape Canaveral, FL               | Ganter, Dr. P.<br>Barry University<br>Academic Health Sciences<br>Miami Shores, FL<br>33161 Phone: (305)758-3392  | 30     | 12/28 | 0<br>2,500      |
| SER | CANA | Utilization of Open Marsh Water Management Rotary Ditches by the Threatened Atlantic Salt Marsh Snake                                       | Goode, G. T.<br>East Volusia Mosquito Control<br>1600 Aviation Center Parkway<br>Daytona Beach, FL<br>32114 Phone: (904)252-8144                              | 20     | 09/89 | 0<br>1,000      |
| SER | CANA | Mosquito Lagoon Water Quality Monitoring  | Rosenlieb, Mr. G.<br>NPS-Water Resources Division<br>301 S. Howes, Room 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8325                                  | 2      | 09/92 | 95,000<br>6,800 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | CANA | Marine Turtle Nest Protection - Screening Versus Predator Removal  | Stiner, J. C.<br>Canaveral National Seashore<br>2532 Garden Street<br>Titusville, FL<br>32796 Phone: (407)267-1110  | 100    | 10/15 | 49,900<br>0   |
| SER | COSW | Survey of the Macrofungi in Congaree Swamp National Monument   | Cowley, Dr. G. T.<br>University of South Carolina<br>Department of Biological Sciences<br>700 Sumter Street<br>Columbia, SC<br>29208 Phone: (803)777-4141 | 20     | 11/93 | 0<br>13,750   |
| SER | COSW | Fish Utilization of the Congaree River Floodplain  | Dean, Dr. J. M.<br>University of South Carolina<br>Department of Biological Sciences<br>700 Sumter Street<br>Columbia, SC<br>29208 Phone: (803)777-3952   | 45     | 12/90 | 0<br>7,500    |
| SER | COSW | Investigation of the impacts of Clear-cutting, Feral Hogs, and white-tailed deer on the native vegetative resources of Congaree Swamp National Monument. | Nix, Dr. L.<br>Clemson University<br>College of Forest Recreation Res.<br>261 Lehotsky Hall<br>Clemson, SC<br>29634-1005 Phone: (803)656-3302             | 30     | 06/91 | 0<br>9,916    |
| SER | COSW | Survey of Beetles in the Genus Methia for Congaree Swamp National Monument   | Philips, Mr. T. K.<br>Montana State University<br>College of Agriculture<br>Department of Entomology<br>Bozeman, MT<br>59717-0002 Phone: (406)994-3860    | 40     | 12/90 | 0<br>5,500    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$     |
|-----|------|--|---|--------|-------|-------------------|
| SER | COSW | Water Quality Research of Myers Creek, Reeves Creek, and Toms Creek at the Congaree Swamp National Monument.   | Rikard, Dr. M.<br>Clemson University<br>College of Forest and Recreation<br>263 Lehotsky Hall<br>Clemson, SC<br>29634-1005 Phone: (919)728-9950 | 75     | 06/90 | 3,705<br>2,713    |
| SER | COSW | Forest Structure and Dynamics of Congaree Swamp National Monument  | Sharitz, Dr. R. R.<br>University of Georgia<br>Savannah River Ecology Laboratory<br>Drawer E<br>Aiken, SC<br>29802 Phone: (803)725-2472         | 20     | 09/09 | 308<br>7,500      |
| SER | CUIS | Reassessment of the Taxonomic Status of the Cotton Mouse ( <i>Peromyscus gossypinus anastasae</i> ) on Cumberland Island, Georgia, and the Implications of this Information for Conservation.                        | Boone, Mr. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone:  | 0      | 00/00 | 0<br>0            |
| SER | CUIS | Reintroduction of Bobcats to Cumberland Island National Seashore   | Conroy, Mr. M. J.<br>University of Georgia<br>GA Coop. Fish & Wildlife Research<br>Athens, GA<br>30602 Phone:                                   | 30     | 12/92 | 31,037<br>175,600 |
| SER | CUIS | Inventory and monitoring of fishes, algae and sessil marine invertebrates of the jetty; and an inventory of fishes and water quality monitoring of South End Ponds of Cumberland Island National Seashore: Phase II. | Richardson, Dr. J. P.<br>Savannah State College<br>Marine Biology Program<br>P.O. Box 20583<br>Savannah, GA<br>31404 Phone:                     | 75     | 05/90 | 0<br>0            |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|---|--|--------|-------|-----------------|
| SER | CUIS | Small mammal populations on Cumberland Island National Seashore                                   | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: | 60     | 12/90 | 500<br>8,200    |
| SER | CUIS | Mare-foal behavior study of feral horses on Cumberland Island National Seashore.                  | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: | 70     | 12/90 | 1,000<br>22,000 |
| SER | CUIS | Habitat preferences of white-tailed deer and feral horses on Cumberland Island National Seashore. | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: | 80     | 12/90 | 6,560<br>23,000 |
| SER | CUIS | Immunosterilization & genetic management of barrier island horses                                 | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: | 85     | 12/90 | 3,000<br>63,095 |
| SER | CUIS | Population Ecology of White-tailed Deer on Cumberland Island National Seashore                    | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone: | 100    | 12/89 | 3,000<br>85,683 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| SER | CUIS | Ecology of armadillos on Cumberland Island National Seashore | Warren, Mr. R. J.<br>University of Georgia<br>School of Forest Resources<br>Athens, GA<br>30602 Phone:  | 80     | 12/90 | 4,500<br>25,500 |
| SER | DECA | Marine crustaceans   | Quackenbush, Dr. L. S.<br>Florida International University<br>Department of Biological Sciences<br>Tamiami Trail<br>Miami, FL<br>33199 Phone: (305)348-3101 | 0      | 12/89 | 0<br>0          |
| SER | EVER | Florida Panther Capture Work                                 | Bass, Mr. O. L.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381                    | 66     | 09/91 | 40,000<br>0     |
| SER | EVER | Florida Panther Population Study                             | Bass, Mr. O. L.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381                    | 66     | 09/91 | 130,000<br>0    |
| SER | EVER | Development of an Oil Spill Response Model using GIS         | Davis, Mr. B.<br>National Aeronautics & Space Admin.<br>Space & Technology Laboratory<br>Building 1100<br>SSC, MS<br>39529 Phone: (601)688-1921             | 30     | 05/93 | 500<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$      |
|-----|------|--|---|--------|-------|-------------------|
| SER | EVER | Wetland Restoration Research in Abandoned Farmland: Everglades National Park - Hole-in-the-Donut | Doren, Mr. R. F.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 60     | 00/91 | 15,000<br>550,000 |
| SER | EVER | East Everglades Exotic Control and Mitigation  | Doren, Mr. R. F.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 0      | 00/00 | 35,000<br>60,000  |
| SER | EVER | Plant Ecology Studies in Everglades National Park  | Doren, Mr. R. F.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 1      | 00/99 | 56,000<br>0       |
| SER | EVER | Elemental baseline studies on slash pine as indicators of air pollution                          | Gough, Dr. L.<br>U.S. Geological Survey<br>Denver Federal Center<br>Mail Stop 973<br>Lakewood, CO<br>80225 Phone: (303)236-5513           | 100    | 01/90 | 50,000<br>0       |

| Reg | Park | Project Title                                    | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|--|---|--------|-------|-----------------|
| SER | EVER | Shark Slough Experimental Water Delivery Studies | Johnson, Mr. R. A.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381       | 50     | 12/90 | 60,000<br>0     |
| SER | EVER | Taylor Slough Water Management Impacts Study     | Johnson, Mr. R. A.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381       | 100    | 12/89 | 55,000<br>0     |
| SER | EVER | Everglades Aquatic Food Web Study                | Loftus, Mr. W. F.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381        | 80     | 09/90 | 90,700<br>4,000 |
| SER | EVER | Air Quality Pine Study                           | Mangis, Ms. D. R.<br>Department of the Interior<br>National Park Service - Air<br>P.O. Box 25287<br>Denver, CO<br>80225-0287 Phone: (303)969-2809 | 70     | 09/89 | 0<br>0          |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | WPSS\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
| SER | EVER | Assessment of Benthic Communities Along Salinity Gradients in Northeast Florida Bay         | Montague, C. L.<br>University of Florida<br>Department of Environmental Engineering Sciences<br>Gainesville, FL<br>32611 Phone: (904)392-0836 | 90     | 06/89 | 0<br>82,500    |
| SER | EVER | Shark Slough Hydro Pattern Study  | Moon, Mr. D. S.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381      | 8      | 12/92 | 17,000<br>0    |
| SER | EVER | Experimental Fire Ecology and Management of Rockridge Habitats in Everglades National Park. | Platt, Mr. W.<br>Louisiana State University<br>Baton Rouge, LA<br>Phone: ( ) -  | 5      | 00/99 | 88,400<br>0    |
| SER | EVER | Seagrass Bed Deterioration  | Robblee, Mr. M. B.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381   | 2      | 09/92 | 72,000<br>0    |
| SER | EVER | Estuary Studies   | Robblee, Mr. M. B.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381   | 50     | 09/90 | 120,000<br>0   |

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| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| SER | EVER | Endangered Species Inventory and Monitoring               | Robertson, Mr. W. B.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 100    | 12/31 | 27,000<br>0      |
| SER | EVER | Florida Panther Genetics Study                            | Roelke, Ms. M.<br>Florida Game Commission<br>Wildlife Research Lab<br>4005 S. Main Street<br>Gainesville, FL<br>32601 Phone: (904)376-6481    | 75     | 09/91 | 15,000<br>30,000 |
| SER | EVER | Criteria Pollutant Monitoring in Everglades National Park | Schmidt, Mr. T. W.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-2381   | 0      | 12/90 | 15,000<br>0      |
| SER | EVER | Marine Data Management in Everglades National Park        | Schmidt, Mr. T. W.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381   | 0      | 00/99 | 15,000<br>0      |
| SER | EVER | Visibility Monitoring in Everglades National Park         | Schmidt, Mr. T. W.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381   | 0      | 12/90 | 2,500<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | EVER | Hydrological Monitoring and Data Management                                | Sikkema, Mr. D. A.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 0      | 00/99 | 162,400<br>0  |
| SER | EVER | Gamefish Harvest Monitoring  | Tilmant, Mr. J. T.<br>Department of the Interior<br>Everglades National Park<br>P.O. Box 279<br>Homestead, FL<br>33030 Phone: (305)245-1381 | 0      | 00/99 | 44,300<br>0   |
| SER | EVER | Water Delivery Schedules for Everglades                                    | Wagner, Mr. J.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)969-2955              | 90     | 12/90 | 0<br>0        |
| SER | FOJE | Long Term Coral Reef Resources Assessment at Fort Jefferson Nat'l Monument | Jaap, Dr. W.<br>Florida Marine Research Institute<br>100 8th Avenue S.E.<br>St. Petersburg, FL<br>33701 Phone: (813)896-8626                | 50     | 09/91 | 37,939<br>0   |
| SER | GRSM | Stream Ecology Teaching Exercise.  | Baranski, Dr. M. J.<br>Catawba College<br>Department of Biology<br>Salisbury, NC<br>28144 Phone:  | 100    | 04/89 | 0<br>0        |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NP\$\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| SER | GRSM | Statistical analysis of elemental concentrations in lichens in GRSM  | Bennett, Dr. J.<br>NPS - Coop. Park Studies Unit<br>Institute of Environmental Studies<br>1040 WARF Bldg, 610 Walnut Street<br>Madison, WI<br>53705 Phone: (608)262-9937 | 0      | 09/99 | 0<br>0         |
| SER | GRSM | Crustacean Distribution in the Southern Appalachians.  | Biernbaum, C. K.<br>College of Charleston<br>Grice Marine Biological Laboratory<br>205 Ft. Johnson<br>Charleston, SC<br>29412 Phone: (803)795-3716                       | 2      | 12/95 | 0<br>200       |
| SER | GRSM | Life History of the Pigmy Salamander, <i>Desmognathus wrighti</i> .  | Bruce, R. C.<br>Executive Director<br>Highlands Biological Station<br>P.O. Box 580<br>Highlands, NC<br>28741 Phone:  | 5      | 12/91 | 0<br>250       |
| SER | GRSM | The Effects of Biannual Removals of Rainbow Trout on Brook Trout and Rainbow Trout Populations in Lost Bottoms Creek of the Great Smoky Mountains. | Carter, B.<br>6524 Lambert Lane<br>Knoxville, TN<br>37918 Phone: (615)689-2006   | 25     | 05/91 | 0<br>4,050     |
| SER | GRSM | Algae of The Great Smoky Mountains National Park.  | Cox, Dr. E. R.<br>Tennessee Wesleyan College<br>Department of Biology<br>Athens, TN<br>37303 Phone: (615)745-7504  | 5      | 12/90 | 0<br>0         |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| SER | GRSM | Eastern White Pine Genetic Variation Study:<br>Southern Appalachian Region.   | Cox, R. A.<br>Tennessee Division of Forestry<br>P.O. Box 2666<br>Knoxville, TN<br>37901<br>Phone: (615)594-6432  | 10     | 12/00 | 0<br>500     |
| SER | GRSM | Plant Systematics Field Trip.   | DeLanglade, Dr. R. A.<br>Wittenberg University<br>Department of Biology<br>Box 720<br>Springfield, OH<br>45501<br>Phone: (513)327-6475                 | 100    | 05/89 | 0<br>600     |
| SER | GRSM | Determinants of the quality of Wildlife<br>Viewing in Cades Cove, Great Smoky Mountains<br>National Park.   | Dulin, J.<br>University of Tennessee<br>P.O. Box 1071<br>Knoxville, TN<br>3901<br>Phone: (659)747-126  | 50     | 08/90 | 0<br>12,000  |
| SER | GRSM | Site and Stand Characteristics Associated<br>with Potential Decline and Regeneration<br>Success of Spruce-Fir Stands in the Southern<br>Appalachians. | Durr, P. C.<br>Great Smoky Mountains National Park<br>Resource Management & Science Div.<br>Route 2<br>Gatlinburg, TN<br>37738<br>Phone: (615)436-7120 | 99     | 12/89 | 0<br>24,000  |
| SER | GRSM | Temporal Revegetation Patterns of Landslides<br>in the Southern Appalachians.   | Dyer, J.<br>University of Georgia<br>Department of Geography<br>Athens, GA<br>30602<br>Phone: (404)542-2856  | 5      | 12/90 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$ |
|-----|------|--|---|--------|-------|----------------|
| SER | GRSM | Rare Plant and Animal Inventory and Monitoring (Natural Heritage Program). | Emmott, R.<br>Great Smoky Mountains National Park<br>Resource Management & Science Div.<br>Gatlinburg, TN<br>37738 Phone: (615)436-1298               | 50     | 12/90 | 25,000<br>0    |
| SER | GRSM | Immobilization of Radionuclides.   | Eng, W.<br>University of Tennessee<br>Department of Microbiology<br>Knoxville, TN<br>37996 Phone: (615)574-7334                                       | 10     | 05/90 | 0<br>115,000   |
| SER | GRSM | Fishes of Great Smoky Mountains National Park.                             | Etnier, D. A.<br>University of Tennessee<br>Department of Zoology<br>Knoxville, TN<br>37996 Phone: (615)974-3107                                      | 85     | 10/90 | 2,500<br>0     |
| SER | GRSM | Histology of ozone injured leaves  | Evans, Dr. L.<br>Manhattan College<br>Lab of Plant Morphogenesis<br>Bronx, NY<br>10472 Phone: (212)920-0266   | 50     | 05/91 | 10,000<br>0    |
| SER | GRSM | Scent Station Index Study.   | Farmer, J. A.<br>Great Smoky Mountains National Park<br>Resource Management & Science Div.<br>Route 2<br>Gatlinburg, TN<br>37738 Phone: (615)436-7120 | 90     | 07/90 | 800<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SER | GRSM | Mating Systems of Marasmioid Fungi (With Emphasis on Marasmius).                                    | Gordon, S. A.<br>University of Tennessee<br>Department of Botany<br>Knoxville, TN<br>37916 Phone: (615)974-6217                           | 75     | 08/90 | 0<br>100      |
| SER | GRSM | Interspecific and Intraspecific Mating Behavior of <i>P. jordani</i> and <i>P. glutinosus</i> .     | Hairston, Dr. W. G.<br>University of North Carolina<br>Department of Biology<br>CB #3280<br>Chapel Hill, NC<br>27599 Phone: (919)966-4405 | 25     | 09/91 | 0<br>0        |
| SER | GRSM | Spiders of the Great Smoky Mountains National Park.   | Harp, J. M.<br>UT/OR Graduate School<br>Oak Ridge National Laboratory<br>P.O. Box 2009<br>Oak Ridge, TN<br>37831 Phone: (615)576-2685     | 25     | 12/90 | 0<br>0        |
| SER | GRSM | Illustrated Guide to the Common Bryophytes of the Great Smoky Mountains National Park.              | Heilman, Dr. A. S.<br>University of Tennessee<br>Department of Botany<br>Knoxville, TN<br>37996 Phone: (615)974-2256                      | 10     | 12/92 | 0<br>200      |
| SER | GRSM | Experiments on the Effects of Trampling and Camping and Implications for Low-Impact Wilderness Use. | Johnson, B.<br>University of Georgia<br>Institute of Ecology<br>Athens, GA<br>30602 Phone: (404)354-1758                                  | 100    | 10/89 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SER | GRSM | Fraser Fir Insect and Disease Resistance Screening and Genetic Variation Study.                   | Johnston, G.<br>University of Tennessee<br>Department of Forestry, Wildlife and Fisheries<br>Knoxville, TN<br>37901 Phone: (615)974-7126    | 30     | 07/95 | 0<br>0        |
| SER | GRSM | American Chestnut Collection.   | Johnston, G.<br>University of Tennessee<br>Department of Forestry, Wildlife and Fisheries<br>Knoxville, TN<br>37901 Phone: (615)974-7126    | 25     | 07/95 | 0<br>0        |
| SER | GRSM | Geochemical and Isotopic Studies of Mafic Igneous Rocks of the Great Smoky Mountains.             | Kish, S. A.<br>Florida State University<br>Department of Geology<br>B-160<br>Tallahassee, FL<br>32306 Phone: (904)644-5860                  | 30     | 12/92 | 0<br>0        |
| SER | GRSM | Inventory of Natural Resources - Plants and Invertebrates.  | Langdon, K. R.<br>Great Smoky Mountains National Park<br>Resource Management & Science Div.<br>Gatlinburg, TN<br>37738 Phone: (615)436-1250 | 0      | 12/90 | 0<br>0        |
| SER | GRSM | Evolution of Trichomycete Gut Fungi in Winter-Emerging Stonefly Nymphs ( <i>Allocapnia</i> spp.). | Lichtwardt, R. W.<br>University of Kansas<br>Department of Botany<br>Lawrence, KS<br>660445 Phone: (913)864-4301                            | 60     | 06/90 | 0<br>7,563    |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| SER | GRSM | Atmospheric Deposition Monitoring.  | Lindberg, S. E.<br>Oak Ridge National Laboratory<br>P.O. Box 2008<br>MS-6038<br>Oak Ridge, TN<br>37831 Phone: (615)574-7857 | 75     | 12/90 | 0<br>100,000 |
| SER | GRSM | Effects of Wild Boar on Small Mammals in<br>GRSM National Park.                                   | Lusk, M. R.<br>North Carolina State University<br>Department of Forestry<br>Box 8002<br>Raleigh, NC<br>27695 Phone:         | 35     | 05/90 | 0<br>3,500   |
| SER | GRSM | Stream Recovery from Acid and Heavy Metal<br>Contamination from Disturbed Anakeesta<br>Formation. | Maas, Dr. R. P.<br>University of North Carolina<br>Environmental Studies<br>Asheville, NC<br>28804 Phone: (704)251-6441     | 100    | 12/89 | 700<br>0     |
| SER | GRSM | Age and Growth of Rainbow Trout in Little<br>River.   | Masterson, S.<br>8427 Kodak Road<br>Knoxville, TN<br>37914 Phone: (615)933-6388   | 25     | 06/91 | 0<br>4,050   |
| SER | GRSM | Collection of Selected Lichen Specimens.  | McGrath, J. K.<br>Delaware Valley Conservation, Inc.<br>Box 393<br>Lansdowne, PA<br>19050 Phone:                            | 10     | 12/90 | 0<br>1,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SER | GRSM | Ozone Effects Monitoring Program.  | Neufeld, Dr. H. S.<br>Great Smoky Mountains National Park<br>Uplands Research Laboratory<br>Route 2<br>Gatlinburg, TN<br>37738 Phone: (704)202-2683 | 75     | 12/90 | 65,000<br>0  |
| SER | GRSM | Spiraea Virginiana Britton.  | Ogle, D. W.<br>Virginia Highlands Comm. College<br>Associate Professor of Biology<br>P.O. Box 828<br>Abingdon, VA<br>24210 Phone: (703)628-6094     | 100    | 12/89 | 0<br>500     |
| SER | GRSM | Visitor Survey.  | Overton, D. J.<br>Great Smoky Mountains National Park<br>Uplands Field Research Lab<br>Gatlinburg, TN<br>37738 Phone: (615)436-7120                 | 100    | 10/89 | 0<br>0       |
| SER | GRSM | Preservation and Evaluation of <i>Pieris floribunda</i> and <i>Fagus grandifolia</i> . | Owings, R. C.<br>The North Carolina Arboretum<br>Route 3<br>Box 1249-B<br>Asheville, NC<br>28806 Phone: (704)665-2492                               | 0      | 12/89 | 0<br>0       |
| SER | GRSM | Regeneration Patterns of Fraser Fir in the Great Smoky Mountains.                      | Pauley, E. F.<br>University of Tennessee<br>Department of Ecology<br>691 Dabney Hall<br>Knoxville, TN<br>37916 Phone: (615)974-3065                 | 100    | 08/89 | 0<br>922     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SER | GRSM | Benthic Macroinvertebrate Ambient Network.                       | Penrose, D.<br>NC Department of Environment,<br>Health & Natural Resources<br>P.O. Box 27687<br>Raleigh, NC<br>27611 Phone: (919)733-6946 | 100    | 12/89 | 0<br>0       |
| SER | GRSM | Study of Intergradation in <i>Plethodon jordani</i> .            | Petranka, J. W.<br>University of North Carolina<br>Department of Biology<br>Asheville, NC<br>28804 Phone:                                 | 100    | 12/89 | 0<br>0       |
| SER | GRSM | Small Mammal-Fisher Study.                                       | Powell, R. A.<br>North Carolina State University<br>Department of Zoology<br>Raleigh, NC<br>27695 Phone:                                  | 95     | 03/90 | 31,100<br>0  |
| SER | GRSM | Investigation of the Boundary of the Bryson City Gneiss.         | Prosser, J.<br>University of Kentucky<br>Department of Geological Sciences<br>Bowman Hall<br>Lexington, KY<br>40506 Phone: (606)257-3758  | 40     | 06/90 | 0<br>1,200   |
| SER | GRSM | Native Plant/Seed Collection for Foothills Parkway Revegetation. | Ray, L. L.<br>USDA-Soil Conservation Service<br>Plant Materials Center<br>Quicksand, KY<br>41363 Phone: (606)666-5069                     | 10     | 12/94 | 0<br>7,500   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
| SER | GRSM | Erosion Control Feasibility Study at Two-Mile Interchange, West Prong of Pigeon River.                                | Sheehan, R. W.<br>Sherwood Industries<br>715 West Locust Street<br>P.O. Box 881<br>Johnson City, TN<br>37605 Phone: (615)929-0380           | 90     | 12/90 | 0<br>0         |
| SER | GRSM | Genetic Variability Among and Between Populations of the Deer Mouse and Red-Backed Vole in the Southern Appalachians. | Steele, Dr. M. A.<br>Wilkes University<br>Department of Biology<br>Wilkes-Barre, PA<br>18766 Phone: (919)761-5000                           | 0      | 09/89 | 0<br>0         |
| SER | GRSM | Collection of Fruiting Bodies of Mushrooms (Species of Russula and Boletus).  | Steglich, W.<br>c/o Dr. Raymond W. Holton<br>University of Tennessee<br>Department of Botany<br>Knoxville, TN<br>37996 Phone: (615)974-2256 | 100    | 09/89 | 0<br>0         |
| SER | GRSM | Land Snail Distributions: Polygyridae.  | Thompson, Dr. F. G.<br>University of Florida<br>Florida Museum of Natural History<br>Gainesville, FL<br>32611 Phone: (904)392-1721          | 20     | 11/92 | 0<br>3,600     |
| SER | GRSM | Systematics of the Genus Desmognathus Salamanders in the Southern Appalachian Mountains.                              | Tilley, S. G.<br>Smith College<br>Department of Biological Sciences<br>Northampton, MA<br>01063 Phone: (413)585-3817                        | 0      | 12/89 | 0<br>4,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Others\$ |
|-----|------|---|---|--------|-------|----------------|
| SER | GRSM | Atmospheric Deposition and Red Spruce Nutrition in the GRSM National Park--Testing the A1 Toxicity Nutrient Deficiency Hypothesis for Red Spruce Decline. | Van Miegroet, H.<br>Oak Ridge National Laboratory<br>Environmental Sciences Division<br>P.O. Box 2008<br>Oak Ridge, TN<br>37831<br>Phone: (615)574-8286 | 75     | 12/89 | 0<br>350,000   |
| SER | GRSM | Forest-Site-Soil Relationships in Great Smoky Mountains.  | Weaver, G. T.<br>Department of Forestry, Wildlife,<br>and Fisheries<br>P.O. Box 1071<br>Knoxville, TN<br>37901<br>Phone: (615)974-7126                  | 100    | 11/89 | 0<br>500       |
| SER | GRSM | Class Exercise on Geographical Variation in Salamanders.  | Wiley, Dr. R. H.<br>University of North Carolina<br>Department of Biology<br>Chapel Hill, NC<br>27599<br>Phone: (919)962-1340                           | 0      | 12/90 | 0<br>0         |
| SER | GUIS | Bibliography of scientific research for Gulf Islands National Seashore  | Claxon, P. G.<br>Rutgers University<br>Doolittle Hall<br>New Brunswick, NJ<br>08903<br>Phone: (201)932-3738   | 60     | 10/86 | 20,000<br>0    |
| SER | GUIS | Perdido Key environmental monitoring  | Dean, R. G.<br>University of Florida<br>Engineering Experiment Station<br>310 Weil Hall<br>Gainesville, FL<br>32611<br>Phone: (904)392-4646             | 5      | 08/93 | 0<br>585,201   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| SER | GUIS | Ecology of Barrier Island Mammal Populations  | Esher, R. J.<br>Mississippi State University<br>MSU Research Center<br>Stennis Space Center, MS<br>39569 Phone: (601)688-2480        | 100    | 06/88 | 30,000<br>0  |
| SER | GUIS | Vegetation monitoring before and after beach renourishment on Perdido Key   | Gibson, D. J.<br>University of West Florida<br>Department of Biology<br>Pensacola, FL<br>32514 Phone: (904)474-2648                  | 5      | 07/94 | 0<br>43,694  |
| SER | GUIS | Study of the composition and dynamics of the brackish and marine macroinvertebrates of Horn and Ship islands, Mississippi, and Perdido Key, Florida.        | Heard, R. W.<br>Gulf Coast Research Laboratory<br>Beach Drive<br>Ocean Springs, MS<br>39564 Phone: (601)374-5550                     | 80     | 06/89 | 32,000<br>0  |
| SER | GUIS | Biological monitoring study of intertidal and subtidal invertebrate populations at Perdido Key, Florida in conjunction with beach renourishment operations. | Heard, R. W.<br>Gulf Coast Research Laboratory<br>Beach Drive<br>Ocean Springs, MS<br>39564 Phone: (601)374-5550                     | 5      | 01/93 | 0<br>115,000 |
| SER | GUIS | Reestablishment of the Perdido Key Beach Mouse ( <i>Peromyscus polionotus trissyllepsis</i> ) on Gulf Islands National Seashore.                            | Holler, N. R.<br>Auburn University<br>U.S. Fish & Wildlife Services<br>331 Funchess Hall<br>Auburn, AL<br>36849 Phone: (205)826-4796 | 100    | 09/88 | 5,000<br>0   |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$    |
|-----|------|--|---|--------|-------|-----------------|
| SER | GUIS | Beach Mouse research program: Gulf Islands National Seashore beach renourishment project | Holler, N. R.<br>Auburn University<br>U.S. Fish and Wildlife Service<br>331 Funchess Hall<br>Auburn, AL<br>36849 Phone: (205)826-4796         | 10     | 08/94 | 0<br>94,016     |
| SER | GUIS | Utilization of Gulf Coast barrier islands by migratory birds.                            | Moore, F. R.<br>University of Southern Mississippi<br>Department of Biological Sciences<br>Hattiesburg, MS<br>39406 Phone: (601)266-4923      | 80     | 04/90 | 14,975<br>2,000 |
| SER | GUIS | Processes and responses of coastal change, Perdido Key, Gulf Islands National Seashore.  | Psuty, N. P.<br>Rutgers University<br>Doolittle Hall<br>New Brunswick, NJ<br>08903 Phone: (201)932-3738                                       | 80     | 06/88 | 29,500<br>0     |
| SER | GUIS | Restoration of Bald Eagle Populations  | Simons, T. R.<br>National Park Service<br>Gulf Islands National Seashore<br>3500 Park Road<br>Ocean Springs, MS<br>39564 Phone: (601)875-9057 | 100    | 06/89 | 20,000<br>5,000 |
| SER | GUIS | Ecology of marine bird and Osprey populations  | Simons, T. R.<br>National Park Service<br>Gulf Islands National Seashore<br>3500 Park Road<br>Ocean Springs, MS<br>39564 Phone: (601)875-9057 | 50     | 03/95 | 10,000<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SER | GUIS | Red Wolf propagation and research project  | Simons, T. R.<br>National Park Service<br>Gulf Islands National Seashore<br>3500 Park Road<br>Ocean Springs, MS<br>39564 Phone: (601)875-9057 | 20     | 08/94 | 0<br>15,000  |
| SER | GUIS | Geographic information system development  | Williams, D. L.<br>University of Southern Mississippi<br>Department of Geography<br>Hattiesburg, MS<br>39406 Phone: (601)266-4733             | 30     | 09/90 | 12,554<br>0  |
| SER | MACA | Development of restoration techniques for removing grease, soot, and similar residues from cave surfaces in Mammoth Cave National Park, Phase II investigations. | Aley, Mr. T.<br>Ozark Underground Laboratory<br>Rt1. Box 62<br>Protom, MO<br>65733 Phone: (417)785-4289                                       | 75     | 00/90 | 8,998<br>0   |
| SER | MACA | Resource Protection Studies to Accompany Test Re-Lighting of a Portion of Mammoth Cave, Mammoth Cave National Park, Kentucky                                     | Aley, Mr. T.<br>Ozark Underground Laboratory<br>Rt. 1 Box 62<br>Protom, MO<br>65733 Phone: (417)785-4289                                      | 30     | 00/99 | 8,000<br>0   |
| SER | MACA | Study of the fresh water fauna in the Green River, Mammoth Cave National Park  | Cicerello, Mr. R. R.<br>KY State Nature Preserves Comm.<br>407 Broadway<br>Frankfort, KY<br>40601 Phone: (502)564-2886                        | 100    | 01/90 | 0<br>8,000   |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| SER | MACA | Mega Lineaments and Fracture Trace Influence on Caves                                     | George, Mr. A. I.<br>1869 Trevilian Way<br>Louisville, KY<br>40205 Phone: (502)454-7713   | 50     | 00/99 | 0<br>1,000   |
| SER | MACA | Investigation of Saltpeter Mining in Mammoth Cave   | George, Mr. A. I.<br>1869 Trevilian Way<br>Louisville, KY<br>40205 Phone: (502)454-7713   | 10     | 00/99 | 0<br>7,000   |
| SER | MACA | Origin of Sulfates in Caves   | George, Mr. A. I.<br>1869 Trevilian Way<br>Louisville, KY<br>40205 Phone: (502)454-7713   | 0      | 00/99 | 0<br>0       |
| SER | MACA | Pseudo Karst in Mammoth Cave National Park  | George, Mr. A. I.<br>1869 Trevilian Way<br>Louisville, KY<br>40205 Phone: (502)454-7713   | 100    | 03/88 | 0<br>300     |
| SER | MACA | Survey, exploration, and mapping of the of Mammoth Cave National Park                     | House, Mr. R. S.<br>Cave Research Foundation<br>2159 Londell Road<br>Arnold, MO<br>63010 Phone:                                     | 1      | 00/99 | 0<br>0       |
| SER | MACA | An Examination of Freshwater Mussels Within The Green River in Mammoth Cave National Park | Manzano, Mr. B. L.<br>NPS, SE Archeological Center<br>P.O. Box 2416<br>Tallahassee<br>Tallahassee, FL<br>32316 Phone: (904)561-9106 | 50     | 08/90 | 600<br>0     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SER | MACA | Geology of Mammoth Cave  | Palmer, Dr. A. N.<br>State University of New York<br>Oneonta, NY<br>13820-1380 Phone: (607)432-6024                   | 70     | 08/10 | 0<br>0        |
| SER | MACA | Comparison of terrestrial cave communities   | Poulson, Dr. T. L.<br>University of Illinois at Chicago<br>P.O. Box 4348<br>Chicago, IL<br>60680 Phone: (312)996-4537 | 50     | 00/99 | 0<br>4,000    |
| SER | MACA | Aquatic cave communities, comparison of streams.   | Poulson, Dr. T. L.<br>University of Illinois at Chicago<br>P.O. Box 4348<br>Chicago, IL<br>60680 Phone: (312)996-4537 | 50     | 00/99 | 0<br>2,000    |
| SER | MACA | Narrative Description of Mammoth Cave  | Sutton, Mr. M.<br>Cave Research Foundation<br>Route 1, Box 110A<br>Annapolis, MO<br>63620 Phone: (314)546-2864        | 4      | 00/99 | 0<br>2,000    |
| SER | MACA | An Archaeological Survey of Prehistoric Gypsum Crystal Mining in the Mammoth Cave System | Tankersley, Dr. K.<br>Illinois State Museum<br>Spring and Edwards<br>Springfield, IL<br>62706 Phone: (217)782-6700    | 50     | 00/99 | 0<br>2,000    |
| SER | MACA | Archeology of the Mammoth Cave area.   | Watson, Dr. P. J.<br>Washington University<br>1 Brookings Drive<br>St, Louis, MO<br>63130-4899 Phone:                 | 80     | 06/00 | 0<br>7,000    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SER | NATR | Studies of lichens occurring in the southeastern United States with emphasis on Saxicolous calciphiles. | Dey, Mr. J. P.<br>Illinois Wesleyan University<br>Department of Biology<br>Bloomington, IL<br>61702 Phone: (309)556-3057                          | 25     | 08/91 | 0<br>0        |
| SER | NATR | Developmental Stability and Heterozygosity in Two Introduced Fire Ants and their Hybrid.                | Ross, Dr. K. G.<br>University of Georgia<br>Department of Entomology<br>Athens, GA<br>30602 Phone: (404)542-7699                                  | 100    | 12/89 | 0<br>53,080   |
| SER | NATR | A Plant Survey of Attala County, Mississippi.   | Winstead, Mr. R.<br>Mississippi State University<br>Department of Biology<br>Route 4, Box 56<br>Kosciusko, MS<br>39090 Phone: (601)289-4625       | 100    | 12/89 | 0<br>0        |
| SER | PINE | Tree Age Structure of Five Selected Pinelands.  | Toops, Mr. P. L.<br>Slippery Rock University<br>Department of Parks & Recreation<br>Route 1, Box 49L<br>Guntown, MS<br>38849 Phone: (601)348-2470 | 100    | 04/89 | 200<br>2,000  |
| SER | ROSE | Native plant seed collection  | Owings, Mr. R.<br>The North Carolina Arboretum<br>Route 3, Box 1249-B<br>Asheville, NC<br>28806 Phone: (704)665-2492                              | 5      | 00/99 | 0<br>50       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$     |
|-----|------|---|---|--------|-------|------------------|
| SER | TORT | Seasonal phenology of the tufted apple budmoth, <i>Platynota idaeusalis</i> (Walker)  | Rock, Mr. G. C.<br>North Carolina State University<br>Entomology Department<br>Box 7626, Grinnells Laborator<br>Raleigh, NC<br>27695-7626 Phone:  | 60     | 11/91 | 0<br>1,000       |
| SER | VIIS | Long Term Monitoring of Fisheries in the Virgin Islands National Park   | Beets, Mr. J.<br>Virgin Islands Fish and Wildlife<br>Red Hook, St. Thomas<br>Phone: (809)775-6762   | 50     | 09/91 | 14,000<br>0      |
| SER | VIIS | 1) Ecophysiology of <i>Millepora alcicornis</i> .<br>2) Extent and significance of Black Band disease in Lameshur Bay. 3) Coral bleaching and hurricane monitoring: destruction and recovery. | Edmunds, Dr. P. J.<br>Eastpoint<br>Nahant, MA<br>01908 Phone: (617)581-7370   | 100    | 12/89 | 500<br>7,000     |
| SER | VIIS | 1) Algal census - Yawzi Point, St. John, Virgin Islands; 2) Seagrass monitoring- Great Lameshur Bay, St. John, USVI .   | Muehlstein, DI. L. K.<br>University of the Virgin Islands<br>St. John, USVI<br>Phone: (809)776-9200   | 50     | 06/90 | 0<br>2,000       |
| SER | VIIS | Dry Forest Restoration Research on VINP Degraded Sites  | Ray, Mr. G. J.<br>National Park Service<br>Virgin Islands National Park<br>P.O. Box 710<br>Cruz Bay, St. John, USVI<br>00830 Phone: (809)776-4704 | 30     | 03/91 | 0<br>58,000      |
| SER | VIIS | St. John Forest Dynamics and Flora Project  | Reilly, Ms. A. E.<br>New York Botanical Garden<br>New York, NY  | 60     | 01/93 | 10,000<br>22,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone  | X done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SER | VIIS | Water Quality Monitoring                                       | Rogers, Dr. C.<br>National Park Service<br>Virgin Islands National Park<br>P.O. Box 710<br>Cruz Bay, St. John, USVI<br>00830 Phone: (809)776-4704 | 100    | 12/89 | 0            |
| SER | VIIS | Windspirit anchor damage study                                 | Rogers, Dr. C.<br>National Park Service<br>Virgin Islands National Park<br>P.O. Box 710<br>Cruz Bay, St. John, USVI<br>00830 Phone: (809)776-4704 | 0      | 12/89 | 0            |
| SER | VIIS | Bleached coral monitoring project                              | Rogers, Dr. C.<br>National Park Service<br>Virgin Islands National Park<br>P.O. Box 710<br>Cruz Bay, St. John, USVI<br>00830 Phone: (809)776-4704 | 0      | 12/89 | 0            |
| SER | VIIS | Peter Bay Reef Monitoring Project                              | Rogers, Dr. C.<br>National Park Service<br>Virgin Islands National Park<br>P.O. Box 710<br>Cruz Bay, St. John, USVI<br>00830 Phone: (809)776-4704 | 0      | 12/89 | 0            |
| SER | VIIS | Long-term monitoring of Coral Reefs,<br>Lameshur Bay, St. John | Rogers, Dr. C.<br>Virgin Islands Nat'l Park<br>P.O. Box 710<br>Cruz Bay, St. John<br>00831 Phone: (809)776-4704                                   | 0      | 00/99 | 13,000       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$    |
|-----|------|--|--|--------|-------|-----------------|
| SWR | BAND | Landscape Ecology of the Jemez Mountains   | Allen, Dr. C. D.<br>University of California<br>Berkeley, CA   | 100    | 01/89 | 0<br>0          |
| SWR | BAND | A Flora of Bandelier National Monument   | Jacobs, B. F.  | 100    | 01/90 | 0               |
| SWR | BAND | Resource - Efficiency and Ecosystem Function<br>in Pinyon-Juniper Communities along an<br>Elevation Gradient in Northern New Mexico. | Lajtha, Dr. K.<br>Boston University<br>Boston, MA  | 50     | 1/90  | 0<br>13,000     |
| SWR | BIBE | Reproductive Biology and Pollination Ecology<br>of "Opuntia kleiniae" complex (Cactaceae) in<br>Trans-Pecos Texas.                   | Allred, Ms. C.<br>Sul Ross State University<br>906 N. 10th.<br>Alpine, TX<br>79830 Phone: (915)837-5112          | 75     | 12/90 | 0<br>100        |
| SWR | BIBE | Vegetative Analysis on a Species By Species<br>Basis   | Amos, Dr. B.<br>Angelo State University<br>Department of Biology<br>San Angelo, TX<br>76909 Phone: (915)942-2189 | 85     | 11/90 | 12,176<br>4,300 |
| SWR | BIBE | Systematics of Curculionidae (Coleoptera).   | Anderson, Dr. R. S.<br>Texas A&M University<br>Department of Entomology<br>College Station, TX<br>77843 Phone:   | 65     | 00/99 | 0<br>0          |
| SWR | BIBE | Upper Cretaceous Floras at Big Bend National<br>Park   | Baghai, Ms. N.<br>University of Texas<br>Department of Botany<br>Austin, TX<br>78713 Phone: (512)471-5858        | 2      | 06/92 | 0<br>300        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Geohydrology and Potential for Contamination of Oak Spring, Big Bend National Park, Texas.  | Baker, Jr., Dr. E. T.<br>U.S. Geological Survey<br>8011 Cameron Rd. Bldg. 1<br>Austin, TX<br>78753 Phone: (512)832-5791                                     | 99     | 10/89 | 80,000<br>0   |
| SWR | BIBE | Magmatic History of Pine Canyon Caldera, Chisos Mountains   | Barker, Dr. D. S.<br>The University of Texas at Austin<br>Department of Geological Sciences<br>Austin, TX<br>78713 Phone:                                   | 95     | 00/99 | 0<br>300      |
| SWR | BIBE | Ecology, behavior (vocalizations) and Summer and Winter distribution of the Gray Vireo "Vireo vicinior"   | Barlow, Dr. J. C.<br>Royal Ontario Museum<br>Department of Ornithology<br>100 Queen's Park<br>Toronto, Ontario<br>M5S 2C6 Phone: (416)586-5522              | 98     | 12/91 | 0<br>1,500    |
| SWR | BIBE | Sources of Interpopulational Variation in Body Size of the Mottled Rock Rattlesnake "Crotalus lepidus" and the Blacktailed Rattlesnake "Crotalus molossus". | Beaupre, Mr. S. J.<br>University of Pennsylvania<br>Leidy Laboratory of Biology<br>Philadelphia, PA<br>19104 Phone: (215)898-8419                           | 25     | 09/92 | 0<br>5,800    |
| SWR | BIBE | Habitat Use and Herd Social Structure of the Collared Peccary "Tayassu tajacu", in Southwestern Texas.  | Benzing, Ms. C. J.<br>University of California<br>Department of Biology Grad. Office<br>405 Hilgard Avenue<br>Los Angeles, CA<br>90024 Phone: (213)206-6514 | 5      | 12/92 | 0<br>2,600    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SWR | BIBE | Fishery Survey of the Rio Grande in Big Bend National Park.  | Bestgen, Mr. K. R.<br>University of New Mexico<br>Department of Biology<br>Albuquerque, NM<br>87110 Phone: (505)277-5340                                      | 0      | 00/99 | 0<br>0        |
| SWR | BIBE | Gambusia gaigei Broodstock Acquisition and Maintenance   | Brooks, Mr. J. E.<br>U.S. Fish & Wildlife Service<br>P.O. Box 219<br>Dexter National Fish Hatchery<br>Dexter, NM<br>88230 Phone:                              | 0      | 00/99 | 0<br>2,000    |
| SWR | BIBE | Modern Pollen Rain in the Big Bend Region of Texas   | Bryant, Jr., Dr. V. M.<br>Texas A&M University<br>Department of Anthropology<br>College Station, TX<br>77843 Phone:   | 90     | 12/90 | 0<br>1,025    |
| SWR | BIBE | Petrology of the Alamo Creek Basalt, Big Bend National Park.   | Carman, Jr., Dr. M. F.<br>University of Houston<br>Department of Geosciences<br>Houston, TX<br>77204-5503 Phone: (713)749-3705                                | 95     | 07/90 | 0<br>450      |
| SWR | BIBE | Preliminary Analysis of Local Response to National Park Service Administration in Big Bend National Park: A Case Study in Three Selected Community Clusters. | Carroll, Dr. M. S.<br>Washington State University<br>Dept. of Natural Resource Sciences<br>123 Johnson Hall<br>Pullman, WA<br>99164-6410 Phone: (509)335-2235 | 100    | 05/89 | 0<br>2,282    |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| SWR | BIBE | Systematics and Ecology of Bees in the Genus "Perdita" (Andrenidae).   | Danforth, Mr. B. W.<br>The University of Kansas<br>Department of Entomology<br>Lawrence, KS<br>66045-2106 Phone: (913)864-4303      | 100    | 06/89 | 0<br>0        |
| SWR | BIBE | Geology of the Sierra Quemada Caldera.   | Deux, Mr. T. W.<br>University of SW Louisiana<br>Geology Department<br>USL Box 44530<br>Lafayette, LA<br>70504 Phone: (318)231-6468 | 75     | 12/90 | 0<br>2,000    |
| SWR | BIBE | An Analysis of Lithic Material from 10 Archeological Sites Recorded During the Archeological Survey on Phase II of the West Entrance Highway Project, Big Bend National Park, Texas. | Dickson, Dr. B.<br>Texas A&M University<br>Department of Anthropology<br>College Station, TX<br>77843 Phone: (409)845-5242          | 60     | 03/90 | 0<br>1,000    |
| SWR | BIBE | Long-term variation in the life history and demography of the iguanid lizards "Sceloporus merriami" and "Urosaurus ornatus".   | Dunham, Dr. A. E.<br>University of Pennsylvania<br>Department of Biology<br>Philadelphia, PA<br>19104-6018 Phone: (215)898-4117     | 0      | 12/91 | 0<br>95,000   |
| SWR | BIBE | History of the Castolon Area   | Elam, Dr. E. H.<br>Sul Ross State University<br>Center for Big Bend Studies<br>Alpine, TX<br>79832 Phone: (915)837-8179             | 20     | 08/92 | 0<br>3,688    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| SWR | BIBE | Insect Fossils and Late Quaternary Environments of Western Texas.   | Elias, Mr. S. A.<br>University of Colorado<br>Institute of Artic & Alpine Reseach<br>Boulder, CO<br>80309 Phone: (303)492-5158   | 100    | 12/89 | 0<br>25,000   |
| SWR | BIBE | Black-capped Vireo Headstart Project  | Fleming, Mr. C. M.<br>National Park Service<br>Big Bend National Park<br>Big Bend Nat'l Park, TX<br>79834 Phone: (915)477-2251   | 80     | 09/90 | 821<br>747    |
| SWR | BIBE | A Paleomagnetic and Isotopic Study of the Gabbro Sills Exposed at Mariscal Mountain Anticline, Big Bend National Park, TX.  | Geissman, Dr. J. W.<br>University of New Mexico<br>Department of Geology<br>Albuquerque, NM<br>87131 Phone: (505)277-4204        | 95     | 12/90 | 0<br>0        |
| SWR | BIBE | A Plan for Providing GIS Workstations and Database Development and Support for Big Thicket National Preserve, Big Bend National Park, and Padre Island National Seashore. | Graham, Dr. L. A.<br>Texas A&M University<br>Department of Entomology<br>College Station, TX<br>77843-2475 Phone: (303)498-1746  | 100    | 04/89 | 66,537<br>0   |
| SWR | BIBE | Genetic Improvement of "Acer grandidentatum"  | Greene, Dr. T. A.<br>Texas Forest Service<br>Forest Science Laboratory<br>College Station, TX<br>77843-2585 Phone: (409)845-2523 | 20     | 01/96 | 0<br>1,000    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| SWR | BIBE | Survey of Black-capped Vireos in Big Bend National Park, Texas         | Griffin, Mr. B.<br>Royal Ontario Museum<br>Department of Ornithology<br>Toronto, Ontario<br>M5S 2C6 Phone: (416)586-5522         | 100    | 09/89 | 0<br>800      |
| SWR | BIBE | Preliminary Survey of Aculeate Hymenoptera in Big Bend National Park.  | Griswold, Dr. T. L.<br>Utah State University<br>Bee Biology and Systematics Lab.<br>Logan, UT<br>84322-5310 Phone: (801)750-2525 | 100    | 12/89 | 0<br>0        |
| SWR | BIBE | Systematics and Evolution of Choroptera (Ephemeroptera:Leptphlebiidae) | Henry, Jr., Mr. B. C.<br>Pan American University<br>Department of Biology<br>Edinburg, TX<br>78539-2991 Phone: (512)381-2011     | 100    | 05/89 | 0<br>0        |
| SWR | BIBE | Distribution and Density of Scorpions in Big Bend National Park.       | Henson, Dr. R. N.<br>Appalachian State University<br>Department of Biology<br>Boone, NC<br>28608 Phone: (704)262-2677            | 35     | 00/99 | 0<br>0        |
| SWR | BIBE | Systematics of Orasema (Hymenoptera: Eucharitidae)                     | Heraty, Dr. J. M.<br>Texas A&M University<br>Department of Entomology<br>College Station, TX<br>77840 Phone:                     | 40     | 12/92 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| SWR | BIBE | Comparative Biology and Karyotypes of East Texas and West Texas Populations of "Achurum sumichrasti" (Orthoptera: Acrididae).   | Hilliard Jr., Dr. J. R.<br>Sam Houston State University<br>Department of Biology<br>Huntsville, TX<br>77341 Phone: (409)294-1031 | 80     | 12/91 | 0<br>0        |
| SWR | BIBE | Systematic Implications of Electrophoretic Variation in Subspecies of the White-winged Dove in the Trans-Pecos Region of Texas. | Hogan, Mr. K.<br>Sul Ross State University<br>Department of Biology<br>Alpine, TX<br>79832 Phone: (915)837-8112                  | 95     | 09/89 | 0<br>4,200    |
| SWR | BIBE | Analysis of Eggshell Thinning and Prey Utilization by Nesting Peregrine Falcons in Big Bend National Park                       | Hogan, Mr. K. M.<br>Texas A&M University<br>Department of Biology<br>College Station, TX<br>77843 Phone: (409)845-7792           | 100    | 09/89 | 1,000<br>0    |
| SWR | BIBE | Biosystematic Study of Some Species of Stipa from Southwest United States and Northern Mexico.                                  | Hoge, Ms. P. S.<br>Utah State University<br>Department of Biology<br>Logan, UT<br>84322-5305 Phone: (801)750-1584                | 25     | 12/90 | 0<br>6,000    |
| SWR | BIBE | Dipteran Fauna of Big Bend National Park, Texas.  | Judd, Ms. D.<br>Texas A&M University<br>Department of Entomology<br>College Station, TX<br>77843 Phone: (409)845-9719            | 20     | 12/94 | 0<br>225      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Lepidoptera Life History Studies of Big Bend National Park.   | Kendall, Dr. R. O.<br>Florida State Coll. of Arthropods<br>5598 Mt. McKinley Drive NE<br>San Antonio, TX<br>78251-9609 Phone: (512)684-2518 | 30     | 00/99 | 0<br>0        |
| SWR | BIBE | Successional Processes in Plant and Small Mammal Communities Following Fire in Big Bend National Park, Texas. | Kinucan, Dr. R. J.<br>Sul Ross State University<br>Division of Range Animal Science<br>Alpine, TX<br>79832 Phone: (915)837-8204             | 5      | 08/89 | 0<br>400      |
| SWR | BIBE | Fungi of Big Bend National park.  | Knaphus, Dr. G.<br>Iowa State University<br>Department of Botany<br>Ames, IA<br>50011 Phone: (515)294-2351                                  | 75     | 12/90 | 0<br>13,178   |
| SWR | BIBE | Lepidoptera of Big Bend National Park   | Knudson, Dr. E. C.<br>804 Woodstock<br>Bellaire, TX<br>77401 Phone:   | 100    | 12/89 | 0<br>0        |
| SWR | BIBE | Geochemical Study of the Mid-Cenozoic Basaltic Rocks of Big Bend National Park.                               | Kuentz, Dr. D. C.<br>University of California<br>Earth Sciences Dept.<br>Santa Cruz, CA<br>95064 Phone: (408)459-4924                       | 10     | 12/90 | 0<br>10,000   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Paleosols of the Javelina Formation   | Lehman, Dr. T. M.<br>Texas Tech University<br>Department of Geosciences<br>Lubbock, TX<br>79409-1053 Phone: (806)742-3102 | 80     | 12/89 | 0<br>5,000    |
| SWR | BIBE | Study of Trans-Pecos Treehole Mosquito Distribution   | Long, Dr. J. D.<br>Sam Houston State University<br>Department of Biology<br>Huntsville, TX<br>77341 Phone: (409)294-1550  | 20     | 12/95 | 0<br>500      |
| SWR | BIBE | Sedimentology and Paleocology of a Transgressive Sandstone Complex, Late Cretaceous Aguja Formation, Trans-Pecos, Texas | Macon, Mr. C. C.<br>Texas Tech University<br>Department of Geosciences<br>Lubbock, TX<br>79409 Phone: (806)742-3102       | 80     | 03/90 | 0<br>1,800    |
| SWR | BIBE | Structural Geology of the Lower Dead Horse Mountains and Boquillas Canyon.  | Maler, Mr. M. O.<br>The University of Texas<br>Department of Geology<br>Austin, TX<br>78713-7909 Phone: (512)471-5172     | 100    | 06/89 | 0<br>750      |
| SWR | BIBE | Rescue and Propagation of the Chisos Mountain Hedgehog Cactus from Alongside Rt. 12.                                    | Miller, Mr. D. J.<br>Chihuahuan Desert Research Inst.<br>P.O. Box 1334<br>Alpine, TX<br>79831 Phone: (915)837-8370        | 50     | 00/99 | 500<br>0      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| SWR | BIBE | Ecotourism Development Strategy: A Conceptual Framework.  | Miller, Ms. F. J.<br>Texas A&M University<br>Dept. of Wildl. & Fisheries Sciences<br>College Station, TX<br>77843-2258 Phone: (409)845-5777 | 15     | 08/90 | 0<br>26,000    |
| SWR | BIBE | The Deposition of the Boquillas Formation of Southwest, Texas   | Miller, Mr. R.<br>University of Texas<br>Department of Geology<br>Box 19049<br>Arlington, TX<br>76019 Phone: (817)795-6424                  | 20     | 12/90 | 0<br>500       |
| SWR | BIBE | Peregrine Falcon Monitoring, Big Bend National Park   | Moore, Ms. B.<br>P.O. Box 173<br>Terlingua, TX<br>79852 Phone: (915)371-2489  | 100    | 09/89 | 6,200<br>0     |
| SWR | BIBE | Pilot Demonstration of Ethnobotanical Input into the NPFLORA Data Base for the Desert Biosphere Reserves (Organ Pipe and Big Bend). | Nabhan, Dr. G. P.<br>Desert Botanical Garden<br>1201 North Galvin Parkway<br>Phoenix, AZ<br>85008 Phone: (602)941-1225                      | 60     | 06/90 | 8,000<br>6,000 |
| SWR | BIBE | Geochemistry of Igneous Rocks of the Big Bend National Park, Texas.   | Nelson, Dr. D. O.<br>NASA<br>SN2<br>NASA/JSC<br>Houston, TX<br>77058 Phone:   | 100    | 06/89 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|--|--|--------|-------|------------------|
| SWR | BIBE | The Ecology of Juvenile Desert Amphibians: Biophysical Ecology and Population Structure.   | Newman, Dr. R. A.<br>VA Tech. & State University<br>Department of Biology<br>Blacksburg, VA<br>24061 Phone: (703)231-3817                                    | 15     | 09/91 | 0<br>3,000       |
| SWR | BIBE | A Plan for Providing GIS Workstations and Database Development and Support for the National Park Service Southwest Region              | O'Doherty, Dr. E. C.<br>U.S. Forest Service<br>3825 East Mulberry St.<br>Fort Collins, CO<br>80524 Phone: (303)498-1746                                      | 20     | 09/90 | 16,750<br>0      |
| SWR | BIBE | Geochemical Study of the Cenomanian-Turonian Extinction Interval in Big Bend National Park   | Orth, Dr. C. J.<br>Los Alamos National Laboratory<br>Isotope and Nuclear Chem. Div.<br>Group INC-11, MS J514<br>Los Alamos, NM<br>87545 Phone: (505)667-4785 | 75     | 12/90 | 0<br>50,000      |
| SWR | BIBE | Behavior of High Risk Mountain Lions in Big Bend National Park, Texas.   | Packard, Dr. J. M.<br>Texas A & M University<br>Dept. of Wildlife & Fisheries Sci.<br>College Station, TX<br>77843-2258 Phone: (409)845-5777                 | 50     | 12/90 | 67,785<br>16,773 |
| SWR | BIBE | Evaluating the Potential Use of Landsat Thematic Mapper Digital Data for Monitoring Desertified Land in Big Bend National Park, Texas. | Parker, Ms. A. M.<br>2491 Sawmill Rd. #1310<br>Santa Fe, NM<br>87505 Phone: (505)988-6333  | 95     | 02/90 | 0<br>0           |



| Reg | Park | Project Title   | Investigator/Address/Phone  | X done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Improving Mapping Accuracies of Vegetation Cover Types within Big Bend National Park, Texas.                | Plumb, Dr. G. A.<br>University of Oklahoma<br>Department of Geography<br>Norman, OK<br>73019 Phone: (405)325-4380   | 80     | 03/90 | 8,000<br>0    |
| SWR | BIBE | Status Report on Festuca ligulata   | Poole, Ms. J. M.<br>Texas Parks and Wildlife Department<br>Texas Natural Heritage Program<br>4200 Smith School Road<br>Austin, TX<br>78744 Phone: (512)389-4363 | 100    | 09/89 | 300<br>1,400  |
| SWR | BIBE | Survey for Sensitive Plants along Trails to be Renovated in the Chisos Mountains of Big Bend National Park. | Poole, Ms. J. M.<br>Texas Parks and Wildlife Department<br>Texas Natural Heritage Program<br>4200 Smith School Road<br>Austin, TX<br>78744 Phone: (512)389-4363 | 100    | 10/89 | 500<br>200    |
| SWR | BIBE | Propagation of Rare Plants of the Chisos Mountains of Big Bend National Park, Texas                         | Poole, Ms. J. M.<br>Texas Parks & Wildlife Department<br>4200 Smith School Road<br>Austin, TX<br>78744 Phone: (512)389-4363                                     | 10     | 09/92 | 300<br>720    |
| SWR | BIBE | Revegetation, Chisos Basin New Construction.  | Powell, Dr. A. M.<br>Chihuahuan Desert Research Inst.<br>P.O. Box 1334<br>Alpine, TX<br>79831 Phone: (915)837-8370  | 100    | 12/89 | 10,000<br>0   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Biochemical genetics and status of "Trachemys gaigeae" and of the "Trachemys scripta" complex in Texas. | Price, A. H.<br>Texas Parks and Wildlife Department<br>Texas Natural Heritage Program<br>4200 Smith School Road<br>Austin, TX<br>78744 Phone: | 55     | 12/90 | 0<br>1,000    |
| SWR | BIBE | Insects Attacking Tamarix.  | Richerson, Dr. J. V.<br>Sul Ross State University<br>Department of Biology<br>Alpine, TX<br>79832 Phone: (915)837-8111                        | 50     | 06/90 | 0<br>3,500    |
| SWR | BIBE | An Environmental Evaluation of the Rio Grande Water Quality in the Big Bend Area.                       | Roberts, Ms. J. L.<br>Sul Ross State University<br>Department of Biology<br>Alpine, TX<br>79832 Phone:  | 100    | 05/89 | 500<br>0      |
| SWR | BIBE | Stratigraphy, Sedimentology, and Vertebrate Paleontology of Eocene Rocks, Big Bend region, Texas.       | Runkel, Dr. A. C.<br>The University of Texas<br>Department of Geology/Paleontology<br>Austin, TX<br>78712 Phone: (512)471-6088                | 100    | 11/89 | 0<br>0        |
| SWR | BIBE | Hydrologic and Geomorphic Features of Telephone Canyon, Big Bend National Park, Brewster, Co. Texas.    | Saunders, Mr. G. P.<br>University of Texas at Austin<br>4910 Pelham Drive<br>Austin, TX<br>78727 Phone: (512)837-4890                         | 85     | 05/90 | 0<br>1,000    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| SWR | BIBE | Paleontological, Sedimentological and Paleomagnetic Investigations of the Late Cretaceous and Early Tertiary Rocks of Big Bend National Park.           | Schiebout, Dr. J. A.<br>Louisiana State University<br>LSU Museum of Geoscience<br>Baton Rouge, LA<br>70803 Phone: (504)388-6884 | 50     | 05/94 | 0<br>10,000   |
| SWR | BIBE | Pollination Ecology of Ocotillo   | Scott, Dr. P. E.<br>The University of Texas<br>Department of Zoology<br>Austin, TX<br>78712 Phone: (512)471-7472                | 100    | 08/89 | 0<br>0        |
| SWR | BIBE | Structural Geology of Black Peaks, Grapevine Hills, Rosillos Mountains, and Dawson Creek Regions in the Big Bend National Park, Brewster, County, Texas | Seiler, Mr. T. J.<br>Sul Ross State University<br>Department of Geology<br>Alpine, TX<br>79832 Phone:                           | 99     | 02/90 | 0<br>3,000    |
| SWR | BIBE | A Survey for Spotted Owls in Davis, Chisos, and Sierra Del Carmen Mountains of West Texas and Northern Coahuila.  | Skaggs, Dr. R. W.<br>New Mexico State University<br>Department of Biology<br>Las Cruces, NM<br>88003-0032 Phone: (505)646-1332  | 100    | 12/89 | 0<br>1,930    |
| SWR | BIBE | Air Quality Monitoring  | Skiles, Jr., Mr. J. R.<br>Big Bend National Park<br>Big Bend Nat'l Park, TX<br>79834 Phone: (915)477-2251                       | 0      | 00/99 | 2,500<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SWR | BIBE | Habitat Selection by Foliage Insectivorous Birds in Mixed Pine-Oak-Juniper Woodland                                    | Smallwood, Mr. J. A.<br>University of California<br>Department of Integrative Biology<br>405 Hilgard Avenue<br>Los Angeles, CA<br>90024-1606 Phone: (213)825-1327 | 40     | 09/91 | 0<br>12,450  |
| SWR | BIBE | Paleontological and Geological Research on the Estufa Canyon Area of Big Bend National Park.                           | Stevens, Dr. M. S.<br>Lamar University<br>Dept. of Geology,<br>P.O. Box 10031<br>Beaumont, TX<br>77710 Phone: (409)880-8236                                       | 75     | 00/99 | 0<br>1,000   |
| SWR | BIBE | Scorpions of Texas.  | Stockwell, Dr. S. A.<br>U.S. Army<br>RDNE Center<br>Attn: STRNC-YMT<br>Natick, MA<br>01760-5020 Phone: (508)651-4596  | 99     | 12/90 | 0<br>0       |
| SWR | BIBE | Annotated List of the Invertebrates (excluding insects) of Big Bend National Park; Visitor Checklist of Common Insects | Van Pelt, Dr. A. F.<br>Greensboro College<br>Biology Professor Emeritus<br>Greensboro, NC<br>27408 Phone: (919)272-7102   | 90     | 02/90 | 800<br>800   |
| SWR | BIBE | Ecology of Mountain Lions in Big Bend National Park.   | Waid, Mr. D.<br>Texas Tech. University<br>Range & Wildl. Sci. Box 4169<br>Lubbock, TX<br>79409 Phone: (806)742-2841   | 99     | 12/90 | 0<br>200     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| SWR | BIBE | Petrified Woods of Big Bend National Park   | Wheeler, Dr. E.<br>North Carolina State University<br>Dept. of Wood & Paper Sciences<br>P.O. Box 8005<br>Raleigh, NC<br>27695 Phone: (919)737-3181                    | 5      | 09/94 | 0<br>1,100     |
| SWR | BIBE | Ecology and Evolution of Grassland Grasshoppers   | Whitcomb, Dr. R. F.<br>U.S. Dept. of Agriculture<br>Agricultural Research Service<br>Beltsville Agri. Research Center<br>Beltsville, MD<br>20705 Phone: (301)344-2339 | 30     | 00/99 | 0<br>2,000     |
| SWR | BIBE | Vegetation and Flora of the Rosillos Mountains and Vicinity, Big Bend National Park, Texas.       | Whitefield, Mr. M. P.<br>Sul Ross State University<br>Biology Department<br>Alpine, TX<br>79831 Phone: (915)877-8112  | 75     | 05/90 | 0<br>1,000     |
| SWR | BIBE | Documentation and Analysis of Boot Canyon Permanent Plots, 1964 - 1987.                           | Whitson, Dr. P. D.<br>University of Northern Iowa<br>Department of Biology<br>Cedar Falls, IA<br>50614-0421 Phone: (319)273-6034                                      | 100    | 04/89 | 3,019<br>2,411 |
| SWR | BIBE | The Petrology and Geochemistry of the Government Spring Laccolith, Big Bend National park, Texas. | Yew, Mr. L.<br>Sul Ross State University<br>Department of Geology<br>Alpine, TX<br>79831 Phone: (915)837-8259   | 75     | 12/90 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$ |
|-----|------|--|---|--------|-------|----------------|
| SWR | BITH | A plan for providing GIS Workstations and Database Development and Support for Big Thicket National Preserve, Big Bend National Park and Padre Island National Seashore. | Graham, L. A.<br>Texas A&M University<br>Department of Entomology<br>College Station, TX<br>77843<br>Phone:   | 100    | 00/99 | 0<br>0         |
| SWR | BITH | Testing scale dependence of models of resource competition   | Harcombe, P. A.<br>Rice University<br>Phone: ( ) -  | 20     | 01/92 | 0<br>49,000    |
| SWR | BITH | Demographic analysis of tree populations and the implications for forest regeneration  | Harcombe, P. A.<br>Rice University<br>Phone: ( ) -  | 80     | 07/90 | 0<br>25,000    |
| SWR | BITH | Air Quality Monitoring Program   | McHugh, D.<br>Big Thicket National Preserve<br>3785 Milam<br>Beaumont, TX<br>77701<br>Phone: (409)839-2690    | 10     | 00/99 | 0<br>0         |
| SWR | BITH | A Plan for Providing GIS Workstations and Database Development and Support for the National Park Service Southwest Region.   | O'Doherty, E. C.<br>Interagency Resource Tech. Lab.<br>Fort Collins, CO<br>Phone: ( ) -                       | 20     | 09/90 | 0<br>0         |
| SWR | BITH | Water Quality Monitoring Program   | Wesloh, E. J.<br>Big Thicket National Preserve<br>3785 Milam<br>Beaumont, TX<br>77701<br>Phone: (409)839-2690 | 10     | 00/99 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| SWR | BUFF | Selection and Development of Photopoints in Fitton Cave  | Huddleston, I. J.<br>North Arkansas Community College<br>Pioneer Ridge<br>Harrison, AR<br>72601 Phone: (501)743-3000                                | 100    | 05/89 | 0<br>4,500   |
| SWR | CACA | Stable isotope study of cave waters in Carlsbad Cavern.  | Chapman, J. B.<br>Water Resources Center<br>Desert Research Institute<br>2505 Chandler Ave., Suite 1<br>Las Vegas, NV<br>89120 Phone: (702)798-8882 | 70     | 12/90 | 0<br>0       |
| SWR | CACA | Study of the Barite Crystals in Lechuguilla Cave.  | Jagnow, D. H.<br>CRF<br>2175 La Tierra<br>Los Alamos, NM<br>87544 Phone: (505)662-0553  | 100    | 12/89 | 0<br>1,000   |
| SWR | CACA | Evidence in support of a barrier reef model of deposition for the Capitan reef complex.          | Kirkland, Ms. B. L.<br>Louisiana State University<br>Dept. of Geology and Geophysics<br>Baton Rouge, LA<br>70803 Phone: (504)388-8328               | 45     | 12/90 | 0<br>200     |
| SWR | CACA | Tepee structures - A comparison of Tepee structures involving Permian and Cretaceous Formations. | McDaniel, Mr. B. K.<br>Sul Ross State University<br>2nd & Scott St<br>c/o BLM<br>Battle Mountain, NV<br>89820 Phone: (702)635-5101                  | 75     | 07/90 | 0<br>1,055   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| SWR | CACA | Paleoecological studies on the ancient bat guano deposits of New Cave and Ogle Cav, Carlsbad Caverns National Park. | McFarlane, Dr. D. A.<br>Natural History Museum of L.A. Co.<br>Sec. of Mammalogy<br>900 Exposition Blvd.<br>Los Angeles, CA<br>90007 Phone: (213)744-3369  | 70     | 12/90 | 0<br>1,000     |
| SWR | CACA | Petrology & Geochemistry of Lechuguilla Cave.   | Palmer, Mr. A. N.<br>State University of New York<br>Department of Earth Sciences<br>Oronta, NY<br>13820-4015 Phone: (607)431-3064                        | 7      | 12/00 | 0<br>0         |
| SWR | CHIC | Geologic Evaluation of the Area Near and Including the Chickasaw National Recreation Area                           | Cates, S. W.<br>U.S. Geological Survey<br>RM. 621 Old Post Office Building<br>215 Dean A. McGee Avenue<br>Oklahoma City, OK<br>73102 Phone: (405)231-4256 | 100    | 04/89 | 3,600<br>1,800 |
| SWR | CHIC | Assessment of spring flow decline (Water Rights)  | Pettee, Mr. C. W.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8321                         | 0      | 00/99 | 5,500<br>0     |
| SWR | GUMO | Systematics, Biogeography and Evolution of Leaf Litter Dwelling Weevils.  | Anderson, Dr. R. S.<br>Texas A&M University<br>College Station, TX<br>77843 Phone: (409)845-9766  | 50     | 12/90 | 0<br>1,000     |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$    |
|-----|------|--|--|--------|-------|------------------|
| SWR | GUMO | Fairy Shrimps, Clam Shrimps, and Tadpole Shrimps of Texas                                    | Belk, Dr. D.<br>Our Lady of the Lake University<br>Biology Dept.<br>San Antonio, TX<br>78207-4666 Phone: (512)434-6711             | 100    | 12/89 | 0<br>1,000       |
| SWR | GUMO | Phytophagous Insects of Baccharis pteronioides   | Boldt, Mr. P. E.<br>U.S. Dept. of Agriculture<br>Soil & Water Res. Lab<br>Temple, TX<br>76502 Phone: (817)770-6530                 | 67     | 03/91 | 0<br>2,000       |
| SWR | GUMO | Movements, Habitat Use, and Population Dynamics of Elk in Guadalupe Mountains National Park. | Carpenter, Mr. J. C.<br>Texas A&M University<br>College Station, TX<br>77840 Phone: (409)845-5777                                  | 90     | 03/90 | 14,000<br>12,072 |
| SWR | GUMO | Silicification and Taphonomy in Permian Carbonates of the Southwestern United States.        | Erwin, Dr. D. H.<br>Michigan State University<br>Dept. of Geological Sciences<br>E. Lansing, MI<br>48824-1115 Phone: (517)353-6493 | 10     | 12/92 | 0<br>2,000       |
| SWR | GUMO | Paleoecology and Roles of Calcareous Sponges in the Origin of the Capitan Limestone.         | Fagerstrom, Dr. J. A.<br>University of Colorado<br>Dept. of Geological Sciences<br>Boulder, CO<br>80309 Phone: (303)459-3266       | 35     | 06/92 | 0<br>1,000       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| SWR | GUMO | Aquatic Invertebrate Survey of McKittrick Canyon in Guadalupe Mountains National Park, Texas.    | Green, Mr. T. M.<br>Texas A&M University<br>Dept. of Biology<br>College Station, TX<br>77843 Phone: (915)584-2985    | 40     | 01/91 | 1,500<br>2,000 |
| SWR | GUMO | The Bee and Stinging Wasp Fauna of Guadalupe Mountains National Park.                            | Griswold, Mr. T. L.<br>U.S. Dept. of Agriculture<br>Utah State University<br>Logan, UT<br>84322 Phone: (801)750-2559 | 10     | 08/94 | 0<br>2,000     |
| SWR | GUMO | Deep-Water Sediment Gravity Flow Deposits  | Handford, Mr. C. R.<br>Arco Oil and Gas Company<br>2300 W. Plano Parkway<br>Plano, TX<br>75075 Phone: (214)754-6869  | 100    | 12/89 | 0<br>2,000     |
| SWR | GUMO | Comparison of Scorpion Populations in Different Life Zones of Guadalupe Mountains National Park. | Henson, Dr. R. N.<br>Appalachian State University<br>Boone, NC<br>28608 Phone: (704)262-2677                         | 5      | 12/94 | 0<br>2,000     |
| SWR | GUMO | Mississippi Valley-Type Ore Deposits in the Guadalupe Mountains.                                 | Hill, Ms. C. A.<br>Box 5444A<br>Albuquerque, NM<br>87123 Phone: (505)296-2705  | 50     | 01/95 | 0<br>100       |
| SWR | GUMO | McKittrick Canyon Rainbow Trout Evaluation   | Hutson, Mr. P.<br>Texas Parks and Wildlife Dept.<br>P.O. Box 947<br>San Marcos, TX<br>78667 Phone: (512)353-0313     | 15     | 03/93 | 0<br>5,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| SWR | GUMO | Evidence in Support of a Barrier Reef Model of Deposition for the Capitan Reef Complex.   | Kirkland, Ms. B. L.<br>Louisiana State University<br>Dept. of Geology and Geophysics<br>Baton Rouge, LA<br>70803 Phone: (504)388-8328 | 45     | 06/91 | 0<br>200     |
| SWR | GUMO | Lepidoptera of Guadalupe Mountains National Park  | Knudson, Dr. E. C.<br>804 Woodstock<br>Bellaire, TX<br>77401 Phone: (713)795-5623   | 30     | 06/93 | 0<br>1,000   |
| SWR | GUMO | Paleobiology and Biostratigraphy of the Cutoff Formation-Guadalupe Mountains National Park, West Texas and New Mexico.                  | Lambert, Mr. L. L.<br>University of Iowa<br>Iowa City, IO<br>52242 Phone: (319)335-1818   | 10     | 05/90 | 0<br>1,800   |
| SWR | GUMO | Depositional Facies and Diagenesis of Reef and Back-reef Facies in The Capitan Reef Complex, New Mexico and Texas.                      | Mazzullo, Dr. S. J.<br>Wichita State University<br>Department of Geology<br>Wichita, KS<br>67208 Phone: (316)652-9430                 | 25     | 01/94 | 0<br>500     |
| SWR | GUMO | The Origin and Timing of Dolomitization of the Forereef Facies of the Permian Capitan Formation, Guadalupe Mountains, Texas-New Mexico. | Melim, Ms. L. A.<br>Southern Methodist University<br>Dept. of Geological Sciences<br>Dallas, TX<br>75275 Phone: (214)692-2750         | 80     | 03/91 | 0<br>5,000   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| SWR | GUMO | Investigation, Surveillance, and Control of Plague and Other Zoonoses in Guadalupe Mountains National Park.                              | Moore, Mr. G. M.<br>Texas Dept. of Public Health<br>6090 Surety Drive<br>P.O. Box 10736<br>El Paso, TX<br>79997 Phone: (915)779-8014 | 50     | 06/92 | 0<br>500      |
| SWR | GUMO | Selective Collections of Vascular Plants in the Guadalupe Mountains National Park, Texas to Determine Threatened and Endangered Species. | Powell, Dr. M. A.<br>Sul Ross State University<br>Dept. of Biology<br>Alpine, TX<br>79832 Phone: (915)837-8112                       | 40     | 12/92 | 0<br>1,500    |
| SWR | GUMO | Geology of the Guadalupe Mountains National Park   | Pray, Dr. L. C.<br>University of Wisconsin<br>Madison, WI<br>53706 Phone: (608)833-5657  | 0      | 06/61 | 0<br>1,000    |
| SWR | GUMO | Survey of Birds in Guadalupe Mountains National Park   | Wauer, Mr. B. W.<br>National Park Service<br>HC 60, Box 400<br>Salt Flat, TX<br>79847 Phone: (915)828-3251                           | 100    | 12/89 | 100<br>0      |
| SWR | HOSP | Investigation of Thermophillic Photosynthetic Bacteria   | Favinger, J. L.<br>Indiana University<br>Biology Department<br>3710 Fullerton Pike<br>Bloomington, ID<br>47401 Phone:                | 50     | 00/99 | 0<br>0        |

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| Reg | Park | Project Title  | Investigator/Address/Phone:   | % done | End   | MPS\$/Other\$  |
|-----|------|--|---|--------|-------|----------------|
| SWR | HOSP | Quantification of Thermal Water Flow                           | Gann, E.<br>U.S. Geological Survey<br>2301 Federal Building<br>Little Rock, AR<br>72201 Phone: (501)378-6391  | 75     | 00/99 | 14,000<br>0    |
| SWR | HOSP | Ostracod Inventory   | Gutentag, Dr. E.<br>U.S. Geological Survey<br>Denver Federal Center<br>Denver, CO<br>80225 Phone: (303)236-0549   | 40     | 06/90 | 1,000<br>1,250 |
| SWR | HOSP | Survey of Fish in Hot Springs National Park                    | Horn, K. L.<br>Northeast Louisiana University<br>Dept. of Biology<br>Garrett Hall<br>Monroe, LA<br>71209 Phone: (318)342-3103                                   | 100    | 12/89 | 0<br>0         |
| SWR | HOSP | Inventory of Phormidium Treleasei at Hot Springs National Park | Meyer, Dr. R.<br>University of Arkansas<br>Dept. of Botany & Microbiology<br>401 Science Engineering Building<br>Fayetteville, AR<br>72701 Phone: (501)575-4901 | 100    | 12/89 | 0<br>600       |
| SWR | HOSP | Landscape Management Plan: Bathhouse Row                       | Walling, L.<br>National Park Service<br>Denver Service Center<br>Denver, CO<br>Phone: (303)327-2100   | 100    | 04/89 | 0<br>0         |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$ |
|-----|------|---|---|--------|-------|----------------|
| SWR | LYJO | Phase II, Hereford Herd Management                                  | Baker, Dr. J. F.<br>Texas A&M University<br>Department of Animal Science<br>College Station, TX<br>77843 Phone:                       | 100    | 05/90 | 0<br>2,500     |
| SWR | PAIS | National Marine Debris Survey                                       | Bjork, J. L.<br>National Park Service - PAIS<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)949-8173     | 25     | 09/93 | 5,000<br>0     |
| SWR | PAIS | Analysis of Water Samples from Oil/Gas Operations                   | Bjork, J. L.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)949-8173   | 100    | 10/89 | 8,500<br>0     |
| SWR | PAIS | Water Quality of Swimming Beaches on Padre Island National Seashore | Bjork, J. L.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)949-8173   | 100    | 09/89 | 8,500<br>0     |
| SWR | PAIS | White Pelican Parasite Study/Management                             | Chapman, B. R.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)991-6810 | 100    | 01/90 | 0<br>0         |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS/Other\$  |
|-----|------|--|---|--------|-------|--------------|
| SWR | PAIS | Evaluation of Vehicular Impacts from Geophysical Seismic Survey on Survival and Regrowth on Padre Island National Seashore | Drawe, Dr. L.<br>Welder Wildlife Refuge<br>P.O. Box 1400<br>Sinton, TX<br>78387<br>Phone: (512)364-2643                                     | 100    | 09/89 | 5,500<br>0   |
| SWR | PAIS | Visitor Use Survey at Bird Island Basin  | Gramman, J. H.<br>Texas A&M University<br>Dept./Recreation, Park, Tourism Sci<br>College Station, TX<br>77843<br>Phone: (409)845-4920       | 100    | 05/89 | 15,000<br>0  |
| SWR | PAIS | Perigrine Falcon Migration Study   | Morizot, D.<br>University of Texas<br>M.D. Anderson Cancer Sci Cen.<br>P.O. Box 389<br>Smithville, TX<br>78957<br>Phone: (512)237-2403      | 0      | 00/99 | 0<br>100,000 |
| SWR | PAIS | Quantification of Sediment Erosion/Deposition in the Bird Island Basin Visitor Use Are of Padre Island National Seashore   | Prouty, Dr. J. S.<br>Coastal Research Associates<br>9350 South Padre Island Dr. #147<br>Corpus Christi, TX<br>78418<br>Phone: (512)994-2436 | 100    | 09/89 | 14,100<br>0  |
| SWR | PAIS | Kemp's Ridley Sea Turtle Restoration and Enhancement Program   | Shaver, D. J.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418<br>Phone: (512)949-8173     | 0      | 00/99 | 10,000<br>0  |

Investigators Annual Report - 1989

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| SWR | PAIS | Sea Turtles in South Texas Inshore Waters                   | Shaver, D. J.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)949-8173 | 60     | 05/90 | 20,000<br>0  |
| SWR | PAIS | Red Tide Effects on Fish and Plakton                        | Shaver, D. J.<br>Padre Island National Seashore<br>9405 South Padre Island Drive<br>Corpus Christi, TX<br>78418 Phone: (512)949-8173 | 100    | 07/89 | 0<br>0       |
| SWR | PAIS | Vegetative History of Padre Island National Seashore        | Sherrod, C. L.<br>Horizon Environmental Service<br>5524 Bee Cave Road<br>Austin, TX<br>78746 Phone: (512)245-2178                    | 100    | 06/89 | 15,000<br>0  |
| SWR | PAIS | Study of Freshwater Ponds in Padre Island National Seashore | Sissom, Dr. S.<br>Southwest Texas State University<br>Department of Biology<br>San Marcos, TX<br>78666 Phone: (512)245-2178          | 33     | 09/90 | 6,799<br>0   |
| SWR | PAIS | Analysis of Benthic Organisms Near Bird Island Basin        | Wicksten, Dr. M.<br>Texas A&M University<br>Department of Biology<br>College Station, TX<br>77843 Phone: (409)845-3388               | 90     | 01/90 | 0<br>18,000  |
| SWR | PAIS | Computer Conversion of Incubation Program and Data.         | Wood, B.<br>9408 Morrow<br>Corepus Christi, TX<br>78410 Phone: (512)241-4406   | 100    | 09/89 | 15,000<br>0  |



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| Reg | Park | Project Title            | Investigator/Address/Phone   | % done | End   | WPS\$/Other\$ |
|-----|------|--------------------------|--|--------|-------|---------------|
| SWR | PAIS | Redhead Duck Ecology     | Woodin, M.<br>U.S. Fish & Wildlife Service<br>6300 Ocean Drive<br>Campus Mail Box 339/CCSU<br>Corpus Christi, TX<br>78412 Phone: (512)888-3372 | 50     | 00/99 | 0<br>85,000   |
| SWR | WUPA | Minority Studies Program | Powell, Dr. S.<br>Northern Arizona University  | 100    | 08/89 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | CABR | Lichen Transplant Study   | Bratt, C. C.<br>Santa Barbara Museum Of Nat Hist<br>2559 Puesta Del Sol Road<br>Santa Barbara, CA<br>93105 Phone: (805)682-4711                       | 100    | 01/89 | 0<br>0        |
| WR  | CABR | National Status & Trends For Marine Environmental Quality               | Lissner, Dr. A. L.<br>Science Applications Intl Corp.<br>476 Prospect Street<br>La Jolla, CA<br>92037 Phone: (619)456-7462                            | 40     | 01/00 | 0<br>0        |
| WR  | CABR | Distribution And Abundance Of Intertidal Turf Algae In San Diego County | Stewart, Dr. J. G.<br>Scripps Institute Of Oceanography<br>Marine Biol. Bldg Rm 3405<br>Mail Code A-002<br>La Jolla, CA<br>92093 Phone: (619)534-4245 | 10     | 12/99 | 0<br>500      |
| WR  | CHIR | Vegetation Monitoring for Prescribed Burn Program                       | Anderson, R. L.<br>National Park Service<br>Chiricahua National Monument<br>HCR 2, Box 6500<br>Willcox, AZ<br>85643 Phone: (602)824-3560              | 0      | 00/99 | 0<br>0        |
| WR  | CHIR | Natural Resources Monitoring Program                                    | Bennett, P. S.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: Bennett                        | 30     | 09/91 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | X done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | CHIR | Annotated Checklist of Vascular Plants of the Chiricahua Mountains   | Bennett, Mr. P. S.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: (602)629-6896 | 30     | 09/91 | 0<br>0        |
| WR  | CHIR | Fourteen Years of Vegetation Change in the Madrean Oak Woodland with Special Reference to the Role of Fire in Oak Woodlands at Chiricahua National Monument and Coronado National Memorial, Arizona. | Bennett, Mr. P. S.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: (602)670-6896 | 10     | 09/93 | 0<br>0        |
| WR  | CHIR | Annotated Checklist of the Flora of the Chiricahua Mts., Arizona   | Bennett, Mr. P. S.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: (602)670-6896 | 30     | 09/93 | 0<br>0        |
| WR  | CHIR | Air Quality Monitoring, IMPROVE Network, Fine Particualtes.  | Beveridge, P.<br>University of California<br>Crocker Nuclear Lab<br>Davis, CA<br>95616 Phone: (916)752-1120                              | 0      | 00/99 | 0<br>0        |
| WR  | CHIR | Gypsy Moth Monitoring  | Boyd, K.<br>Ariz Ag. and Hort. Commission<br>1688 West Adams<br>Phoenix, AZ<br>85007 Phone: (602)255-4373                                | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| WR  | CHIR | Gypsy Moth Monitoring   | Boyd, K.<br>Ariz Ag. and Hort. Commission<br>1688 West Adams<br>Phoenix, AZ<br>85007 Phone: (602)255-4373                              | 0      | 00/99 | 0<br>0       |
| WR  | CHIR | Air Quality Monitoring, Visibility                                | Dietrich, D.<br>Air Resources Specialists, Inc.<br>1901 Sharp Piont Drive<br>Suite E<br>Fort Collins, CO<br>80525 Phone: (303)484-7941 | 0      | 00/99 | 0<br>0       |
| WR  | CHIR | Elemental Content of Tree Rings, Foliage and Soils                | Ferenbaugh, R. W.<br>Los Alamos National Laboratory<br>P.O.Box 1663<br>Los Alamos, NM<br>87545 Phone: (505)667-0811                    | 70     | 12/90 | 0<br>0       |
| WR  | CHIR | Analysis of Growth Trends and Variations in Conifers from Arizona | Graybill, D.<br>University of Arizona<br>Lab of Tree Ring Research<br>105 West Stadium<br>Tucson, AZ<br>85721 Phone:                   | 70     | 12/90 | 0<br>0       |
| WR  | CHIR | National Dry Deposition Network Monitoring                        | Hodges, M.<br>Hunter/ESE Environmental Services<br>P.O. Box 1703<br>Gainesville, FL<br>32602-1703 Phone: (904)332-3318                 | 0      | 00/99 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | CHIR | Bibliography of Natural Resources                                | Horn, R.<br>National Park Service<br>Western Arch. Conservation Center<br>P.O.Box 41058<br>Tucson, AZ<br>85717 Phone: (602)670-6501           | 30     | 09/91 | 0<br>0       |
| WR  | CHIR | Annotated Checklist of the Flora of the Chiricahua Mts., Arizona | Johnson, R. R.<br>National Park Service<br>P.O. Box 41058<br>1415 N. 6th Ave.<br>Tucson, AZ<br>85717 Phone: (602)670-6896                     | 0      | 12/90 | 0<br>0       |
| WR  | CHIR | Annotated Checklist of Birds of the Chiricahua Mountains         | Johnson, Dr. R. R.<br>National Park Service<br>P.O. Box 41058<br>1415 N. 6th Ave.<br>Tucson, AZ<br>85717 Phone: (602)670-6896                 | 70     | 09/90 | 0<br>0       |
| WR  | CHIR | Live Fuel Moisture Monitoring Program                            | King, A.<br>National Park Service<br>Chiricahua National Monument<br>Dos Cabezas Route, Box 6500<br>Willcox, AZ<br>85643 Phone: (602)824-3560 | 0      | 00/99 | 0<br>0       |
| WR  | CHIR | Reptiles and Amphibians of Chiricahua National Monument          | Lowe, Dr. C.<br>University of Arizona<br>Dept of Renewable Natural Resources<br>Tucson, AZ<br>85717 Phone: (602)000-0000                      | 90     | 09/90 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | CHIR | Volcanic and Petrologic History of the Turkey Creek Caldera  | Pallister, J. S.<br>U.S. Geological Survey<br>Office of Earthquakes and Volcanoes<br>Box 25046, M.S. 903<br>Denver, CO<br>80225 Phone: (303)236-1023 | 30     | 12/99 | 0<br>0        |
| WR  | CHIR | Fire and Flood in a Canyon Woodland: The Effect of Floods and Debris Flows in the Past Fire Regime | Swetnam, Dr. T. W.<br>University of Arizona<br>Lab of Tree-Ring Research<br>Building #58<br>Tucson, AZ<br>85721 Phone: (602)621-2112                 | 10     | 12/91 | 1<br>9        |
| WR  | CHIR | Air Quality Monitoring, Visibility, Transmissometer  | Tree, R.<br>Air Resources Specialists, Inc.<br>1901 Sharp Point Drive<br>Suite E<br>Fort Collins, CO<br>80525 Phone: (303)484-7941                   | 0      | 00/99 | 1<br>14       |
| WR  | CHIS | SRI Beach Monitoring Design Study  | Davis, Mr. G. E.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157      | 70     | 09/90 | 37,000<br>0   |

| Reg | Park | Project Title                             | Investigator//Address/Phone   | % done | End   | MPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| WR  | CHIS | Terrestrial Vegetation                    | Halvorson, Dr. W. L.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157 | 80     | 12/92 | 75,350<br>2,000 |
| WR  | CHIS | Dudleya Traskiae Population Biology Study | Halvorson, Dr. W. L.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157 | 95     | 12/89 | 3,000<br>7,700  |
| WR  | CHIS | Exotic Plant Species Control Study        | Halvorson, Dr. W. L.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157 | 90     | 12/90 | 37,350<br>1,000 |
| WR  | CHIS | Black Rat Control Study                   | Halvorson, Dr. W. L.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157 | 95     | 12/90 | 18,500<br>0     |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$  |
|-----|------|---|---|--------|-------|----------------|
| WR  | CHIS | Rare Plant Species Management Study   | Halvorson, Dr. W. L.<br>National Park Service<br>Channel Islands National Park<br>1901 Spinnaker Drive<br>Ventura, CA<br>93001 Phone: (805)644-8157 | 80     | 12/90 | 4,350<br>1,000 |
| WR  | DEVA | Monitoring water levels of Devil's Hole   | Albright, Mr. J. S.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8306                 | 0      | 00/99 | 5,000<br>0     |
| WR  | DEVA | Possible insectivorous characteristics of<br>Desert Rocknettle                                | Barland, B.<br>University of Puget Sound<br>Biology Department<br>1500 N. Warner<br>Tacoma, WA<br>98416 Phone: (206)756-3121                        | 10     | 05/91 | 0<br>0         |
| WR  | DEVA | Flora and Vegetation Analysis of the<br>Panamint Mountains, Death Valley National<br>Monument | Bradney, D. J.<br>4332 Eastern Ave. N.<br>Seattle, WA<br>98103 Phone:   | 90     | 09/90 | 0<br>0         |
| WR  | DEVA | Yucca Mountain Project Environmental<br>Radiological Monitoring Activity                      | Costa, C.<br>U.S. Env'tl. Protection Agency<br>P.O. Box 93478<br>Las Vegas, NV<br>89193-3478 Phone: (702)798-2305                                   | 4      | 00/99 | 0<br>0         |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | DEVA | An Investigation of Desert Bighorn Ecology in Death Valley                                 | Douglas, Dr. C. L.<br>NPS-Coop. Park Studies Unit<br>University of Nevada<br>Dept. of Biological Sciences<br>Las Vegas, NV<br>89154 Phone: (702)739-3219 | 0      | 00/98 | 4,000<br>0    |
| WR  | DEVA | A Study of Vegetational Recovery Following Burro Removal in Death Valley National Monument | Douglas, Dr. C. L.<br>NPS-Coop. Park Studies Unit<br>University of Nevada<br>Dept. of Biological Sciences<br>Las Vegas, NV<br>89154 Phone: (702)739-3219 | 80     | 00/99 | 0<br>0        |
| WR  | DEVA | Thermal IR Spectral Properties of Saline Terrains  | Eastes, J. W.<br>U.S. Army<br>Remote Sensing Division<br>USAETL<br>Ft. Belvoir, VA<br>22060-5546 Phone:  | 100    | 10/89 | 0<br>0        |
| WR  | DEVA | Biochemical Systematics of Pupfish   | Echelle, A. A.<br>Oklahoma State University<br>Zoology Dept.<br>Stillwater, OK<br>74078 Phone: (405)744-9681   | 20     | 12/92 | 0<br>0        |
| WR  | DEVA | Controls on nutrient levels in desert winter annuals                                       | Field, C.<br>Carnegie Institution<br>290 Panama St.<br>Stanford, CA<br>94305 Phone: (415)325-1521  | 100    | 06/89 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | DEVA | Geothermal fluid genesis in the Great Basin  | Flynn, T.<br>University of Nevada<br>Division of Earth Sciences<br>100 Washington St. #201<br>Reno, NV<br>89503 Phone: | 85     | 05/90 | 0<br>0        |
| WR  | DEVA | A survey of Pilobolus from Death Valley  | Foos, M. K.<br>Indiana University East<br>2325 Chester Blvd.<br>Richmond, IN<br>47374 Phone:                           | 0      | 00/99 | 0<br>0        |
| WR  | DEVA | Lead isotope constraints on the age and origin of gold and silver mineralization in the Panamint Mountains, California | Gecy, R.<br>Dartmouth College<br>Dept. of Earth Sciences<br>Hanover, NH<br>03755 Phone: (603)646-2373                  | 50     | 09/90 | 0<br>0        |
| WR  | DEVA | Relictual populations of Great Basin invertebrates   | Giuliani, D.<br>170 Flower Alley<br>Big Pine, CA<br>93513 Phone:   | 65     | 12/96 | 0<br>0        |
| WR  | DEVA | Radar roughness/aeolian roughness  | Greeley, R.<br>Arizona State University<br>Dept. of Geology<br>Tempe, AZ<br>85287-1404 Phone: (602)965-7029            | 10     | 01/93 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | DEVA | Biogeography and water chemistry of aquatic insect habitat   | Herbst, D. B.<br>University of California<br>Sierra Nevada Aquatic Research Lab<br>Route 1, Box 198<br>Mammoth Lakes, CA<br>93546 Phone: (619)935-4256 | 25     | 00/99 | 0<br>0       |
| WR  | DEVA | Tectonometamorphism of the Funeral Mountains   | Hoisch, T. D.<br>Northern Arizona University<br>Dept. of Geology<br>Box 6030<br>Flagstaff, AZ<br>86011 Phone:  | 70     | 06/91 | 0<br>0       |
| WR  | DEVA | Uplift history of the Black Mountains crustal section, Death Valley region, California   | Holm, D. K.<br>Harvard University<br>24 Oxford St.<br>Cambridge, MA<br>02138 Phone: (617)495-9717  | 60     | 05/90 | 0<br>0       |
| WR  | DEVA | Magnetostratigraphy of a section of Plio-Pleistocene lake sediments in the southern Confidence Hills, Death Valley, California | Kirschvink, J. L.<br>Calif. Inst. of Technology<br>M.S. 170-25<br>Pasadena, CA<br>91125 Phone: (818)356-6187   | 60     | 05/90 | 0<br>0       |
| WR  | DEVA | Assessing the variables that affect albedo in an arid environment  | Knapp, D. E.<br>University of Illinois<br>Dept. of Geogr., 220 Davenport Hall<br>607 S. Mathews<br>Urbana, IL<br>61801 Phone: (217)333-3129            | 20     | 08/90 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$ |
|-----|------|--|---|--------|-------|----------------|
| WR  | DEVA | A Study of Vegetational Reinvasion Following the Saline Fire in Death Valley National Monument | Leary, Dr. P. J.<br>Clark County Community College<br>Dept. Science & Health<br>3200 E. Cheyenne<br>Las Vegas, NV<br>89030 Phone: (702)643-6060 | 80     | 00/99 | 0<br>0         |
| WR  | DEVA | A magnetotelluric investigation of the crust in the California Basin and Range                 | Mackie, R.<br>Massachusetts Inst. of Tech.<br>Room 54-614<br>Cambridge, MA<br>02139 Phone: (617)253-1909  | 50     | 12/89 | 0<br>0         |
| WR  | DEVA | Structural and kinematic evolution of the Badwater Turtleback, Death Valley, California        | Miller, M.<br>University of Washington<br>Dept. of Geol. Sci., AJ-20<br>Seattle, WA<br>98195 Phone:   | 50     | 05/92 | 0<br>0         |
| WR  | DEVA | Bighorn use of Quartz Spring   | Raggio, V.<br>Volunteer for Bill Dunn<br>30472 San Francisco Cyn. Rd.<br>Saugus, CA<br>91350 Phone:   | 0      | 00/99 | 0<br>0         |
| WR  | DEVA | Aerosolic dust additions to soils in southern Nevada and southern California                   | Reheis, M. C.<br>U.S. Geological Survey<br>MS-913<br>Federal Center, Box 25046<br>Lakewood, CO<br>80225 Phone:                                  | 50     | 10/95 | 0<br>0         |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | DEVA | Neogene uplift and fault history of the Black Mountains crystalline block in Death Valley, California | Serpa, L. F.<br>University of New Orleans<br>Dept. of Geology and Geophysics<br>New Orleans, LA<br>70148 Phone: (504)286-6325 | 80     | 01/91 | 0<br>0        |
| WR  | DEVA | Paleontology of the Lower Cambrian Wood Canyon Formation, eastern California and western Nevada       | Signor, P. W.<br>University of California<br>Dept. of Geology<br>Davis, CA<br>95616 Phone: (916)752-0846                      | 60     | 12/89 | 0<br>0        |
| WR  | DEVA | Tamarix Ecology in Death Valley, Lake Mead, and Petrified Forest                                      | Smith, Dr. S. D.<br>University of Nevada<br>Dept. of Biological Sciences<br>Las Vegas, NV<br>89154 Phone:                     | 100    | 05/89 | 0<br>0        |
| WR  | DEVA | A pilot study of desert kit fox at Death Valley National Monument                                     | Stockwell, C.<br>University of Nevada<br>Department of Biology<br>Reno, NV<br>89557 Phone:                                    | 85     | 02/90 | 0<br>0        |
| WR  | DEVA | Upper Paleozoic stratigraphy of the Death Valley region   | Stone, P.<br>U.S. Geological Survey<br>345 Middlefield Rd.<br>MS 975<br>Menlo Park, CA<br>94025 Phone: (415)329-4958          | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | DEVA | Quaternary regional hydrology  | Stuckless, J. S.<br>U.S. Geological Survey<br>Box 25046, MS 963<br>Denver Federal Center<br>Denver, CO<br>80225-0046 Phone: (702)776-7886 | 1      | 12/93 | 0<br>0       |
| WR  | DEVA | Nevada Nuclear Waste Site Investigation,<br>Yucca Mountain Project, Paleohydrology<br>Studies                              | Talbot, W. R.<br>U.S. Geological Survey<br>M.S. 421<br>Box 25046, DFC<br>Denver, CO<br>80225 Phone: (303)236-0463                         | 5      | 01/96 | 0<br>0       |
| WR  | DEVA | Petrologic investigations of the Death<br>Valley volcanic field  | Thompson, R. A.<br>U.S. Geological Survey<br>Box 25046, MS 913<br>Denver Federal Center<br>Denver, CO<br>80225 Phone:                     | 50     | 09/91 | 0<br>0       |
| WR  | DEVA | Miocene evolution of the Amargosa Chaos<br>basin, southern Death Valley, California  | Topping, D. J.<br>University of Washington<br>Dept. of Geol. Sci., AJ-20<br>Seattle, WA<br>98195 Phone: (206)543-1996                     | 30     | 12/90 | 0<br>942     |
| WR  | DEVA | Geologic map of the Funeral Mountains<br>(Chloride Cliff 15' quad, and parts of the<br>Big Dune and Stovepipe Wells Quads) | Troxel, B. W.<br>2961 Redwood Avenue<br>Napa, CA<br>94568 Phone:  | 95     | 11/89 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| WR  | DEVA | Monitoring impact of groundwater withdrawals                    | Williams, Mr. O. R.<br>NPS-Water Resources Division<br>301 S. Howes Street, Rm 353<br>Ft. Collins, CO<br>80521 Phone: (303)221-8301                 | 0      | 00/99 | 0<br>0       |
| WR  | DEVA | Paleoclimatology and paleohydrology of the southern Great Basin | Winograd, I. J.<br>U.S. Geological Survey<br>National Center (432)<br>Reston, VA<br>22092 Phone: (703)648-5849                                      | 60     | 01/94 | 0<br>0       |
| WR  | FOBO | Vegetation of Fort Bowie National Historic Site                 | Warren, P. L.<br>The Nature Conservancy<br>300 E. University Blvd., Suite 230<br>Tucson, AZ<br>85705 Phone: (602)622-3861                           | 80     | 09/90 | 0<br>0       |
| WR  | GOGA | Potential for control of an exotic weed by a native insect.     | Bernays, Dr. E. A.<br>University of California<br>Division of Biological Control<br>1050 San Pablo Ave.<br>Albany, CA<br>94706 Phone: (415)642-0674 | 75     | 08/90 | 0<br>35,000  |
| WR  | GOGA | Genetics of California Bay (Umbellularia californica)           | Davies, Dr. H. M.<br>Cal Gene, Inc.<br>1920 Fifth St.<br>Davis, CA<br>95616 Phone: (916)753-6313  | 100    | 12/89 | 0<br>100     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$   |
|-----|------|--|---|--------|-------|------------------|
| WR  | GOGA | Land Use Shifts during the Protohistoric Period in Southern Marin County, California | Duncan, Ms. F. L.<br>726 38th Ave.<br>San Francisco, CA<br>94121 Phone:   | 100    | 12/89 | 0<br>2,000       |
| WR  | GOGA | West Coast Raptor Migration  | Howell, Mr. J. A.<br>National Park Service<br>Golden Gate NRA<br>Fort Mason, 201<br>San Francisco, CA<br>94123 Phone: (415)556-9506           | 33     | 01/04 | 15,000<br>40,000 |
| WR  | GOGA | Molecular Population Genetics of Island Isopods                                      | Lawson, Dr. R.<br>Stanford University<br>Herrin Laboratories<br>Center for Conservation Biology<br>Stanford, CA<br>94305 Phone: (415)325-9863 | 75     | 06/90 | 0<br>0           |
| WR  | GOGA | Geomorphic Investigations - Tennessee Valley, Marin County, California               | Montgomery, Mr. D. R.<br>University of California<br>Dept. of Geology & Geophysics<br>Berkeley, CA<br>94720 Phone: (415)642-9116              | 90     | 11/90 | 0<br>2,000       |
| WR  | GOGA | Marin Headland Bobcat Research Project   | Oswald, Mr. B.<br>National Park Service<br>Golden Gate NRA<br>Ft. Cronkhite, Bldg 1056<br>Sausalito, CA<br>94965 Phone: (415)331-3812         | 50     | 12/92 | 2,000<br>0       |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | GOGA | Diet and Reproductive Performance of the Western Gull, <i>Larus occidentalis</i> , on Alcatraz Island. | Pierotti, Dr. R.<br>University of Arkansas<br>Dept. of Zoology<br>Fayetteville, AR<br>72701 Phone: (501)575-6709                        | 60     | 07/93 | 0<br>1,500   |
| WR  | GOGA | Macroalgal Study, Land's End   | Smith, Ms. M.<br>750 Phelps St.<br>San Francisco, CA<br>94124 Phone:  | 95     | 05/89 | 0<br>0       |
| WR  | GRBA | The Evolution of a Park: A Case Study of Great Basin National Park                                     | Brown, Mr. P. J.<br>Oregon State University<br>Department of Forest Resources<br>Corvallis, OR<br>97331 Phone: (503)737-2056            | 0      | 00/99 | 0<br>0       |
| WR  | GRBA | Effects of Floral Characteristics on Foraging Behavior of Pollinators                                  | Coley, P. D.<br>University of Utah<br>Department of Biology<br>201 Biology Building<br>Salt Lake City, UT<br>84112 Phone: (801)581-7088 | 100    | 06/89 | 0<br>0       |
| WR  | GRBA | Microhabitat Use by Small Rodents  | Coley, P. D.<br>University of Utah<br>Department of Biology<br>201 Biology Building<br>Salt Lake City, UT<br>84112 Phone: (801)581-7088 | 100    | 06/89 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| WR  | GRBA | Livestock Grazing Management Planning and Research                       | Eddleman, Mr. L.<br>Oregon State University<br>Department of Rangeland Resources<br>Corvallis, OR<br>97331 Phone: (503)737-8434                 | 0      | 00/99 | 0<br>0        |
| WR  | GRBA | Post-glaciopluvial Co-Dispersal of Truffles and Trees in the Great Basin | Fogel, Dr. R.<br>University of Michigan Herbarium<br>North University Building<br>Ann Arbor, MI<br>48109 Phone: (313)764-5546                   | 0      | 09/89 | 0<br>0        |
| WR  | GRBA | Stable Isotope Study of Water in Lehman Caves, Nevada                    | Ingraham, Dr. N. L.<br>Water Resources Center<br>Desert Research Institute<br>2505 Chandler Ave.<br>Las Vegas, NV<br>89120 Phone: (702)798-8882 | 0      | 00/99 | 0<br>0        |
| WR  | GRBA | Alpine Flora of Great Basin National Park                                | Johnson, Dr. R. E.<br>Washington State University<br>Charles R. Conner Museum<br>Pullman, WA<br>99164 Phone: (509)335-1977                      | 90     | 12/90 | 0<br>0        |
| WR  | GRBA | Moths of the Great Basin National Park                                   | Mckown, S.<br>1201 Avenue "K"<br>Boulder City, NV<br>89005 Phone: (702)294-1062   | 40     | 05/92 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | WPS/Other\$ |
|-----|------|--|---|--------|-------|-------------|
| WR  | GRBA | Ecological systems monitoring at Great Basin National Park, Nevada: phase I Baseline Water Quality Monitoring. | Metcalf, Dr. R. C.<br>Lockheed Engineering and Sciences<br>Environmental Programs<br>1050 E. Flamingo Road<br>Las Vegas, NV<br>89119 Phone: (702)734-3221 | 95     | 08/90 | 0<br>0      |
| WR  | GRBA | Biogeography and Biodiversity of the Leafhoppers of the Great Basin (Homoptera:Cicadellidae).                  | Nielson, Dr. M. W.<br>Brigham Young University<br>Monte Bean Life Museum<br>Provo, UT<br>84602 Phone: (801)378-6356                                       | 1      | 10/92 | 0<br>0      |
| WR  | GRBA | Zooplankton Community Ecology in the High Elevation Lakes of Great Basin National Park                         | Starkweather, Dr. P. L.<br>University of Nevada<br>Dept. of Biological Sciences<br>Las Vegas, NV<br>89154 Phone:  | 50     | 00/99 | 0<br>0      |
| WR  | GRCA | Rock Art Investigations in the Western Grand Canyon  | Allen, Ms. M. K.<br>181 East 200 North<br>Washington, UT<br>84780 Phone: (801) -  | 0      | 00/99 | 0<br>0      |
| WR  | GRCA | Grandview and Hermit Trails Historical Research Study, Grand Canyon National Park, Arizona                     | Avery, Dr. V. T.<br>Northern Arizona University<br>Center for Colorado Plateau Studies<br>P.O. Box 5613<br>Flagstaff, AZ<br>86011 Phone: (602)523-2562    | 90     | 03/90 | 0<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | GRCA | Environmental Interpretation of the Surprise Formation   | Beus, Dr. S. S.<br>Northern Arizona University<br>Department of Geology<br>P.O. Box 6030<br>Flagstaff, AZ<br>86011-0630 Phone: (602)523-4561               | 80     | 12/92 | 0<br>0       |
| WR  | GRCA | Ecology of Wintering Bald Eagles at Nankoweap Creek, Grand Canyon National Park  | Brown, Dr. B. T.<br>SWCA Environmental Consultants<br>P.O. Box 3741<br>Tucson, AZ<br>85722 Phone: (602) -  | 0      | 00/99 | 0<br>0       |
| WR  | GRCA | Grand Canyon Peregrine Falcon Population Study   | Brown, Dr. B. T.<br>SWCA Environmental Consultants<br>P.O. Box 3741<br>Tucson, AZ<br>85722 Phone: (602)327-3630  | 80     | 09/90 | 0<br>0       |
| WR  | GRCA | Pacific-Arizona Crustal Experiment - North Rim Extension   | Cipar, Mr. J.<br>Solid Earth Geophysics Division<br>Earth Sciences<br>U.S Air Force Geophysics Laboratory<br>Hanscom AirForceBase, MA<br>01731-5000 Phone: | 100    | 09/89 | 0<br>0       |
| WR  | GRCA | A Sedimentologic and Petrologic Study of the Walcott Member of the Late Proterozoic Chuar Group, Grand Canyon, Arizona | Cook, Mr. D. A.<br>Northern Arizona University<br>Department of Geology<br>P.O. Box 6030<br>Flagstaff, AZ<br>86011-6030 Phone: (602)523-2562               | 50     | 01/91 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| WR  | GRCA | Imaging the Transition from the Colorado Plateau to the Basin and Range Provinces in North Central Arizona Using Teleseismic Tomography | Dawson, Mr. P.<br>U.S. Geological Survey, Seismology Earthquakes, Volcanoes & Engineering<br>345 Middlefield Road, Mail Stop 977<br>Menlo Park, CA<br>94025 Phone:  | 67     | 06/91 | 0<br>1,900   |
| WR  | GRCA | A Survey of Pilobolus from Grand Canyon National Park   | Foos, Dr. K. M.<br>Indiana University East<br>Department of Biology<br>2325 Chester Boulevard<br>Richmond, IN<br>47374 Phone:                                       | 90     | 12/90 | 0<br>7,000   |
| WR  | GRCA | Refining Fire Prescriptions by Predicting Fuel Loading and Fuel Reduction in Ponderosa Pine at Grand Canyon National Park, Arizona      | Fule, Mr. P.<br>Northern Arizona University<br>School of Forestry<br>P.O. Box 4098<br>Flagstaff, AZ<br>86011-4098 Phone: (602)523-2562                              | 40     | 09/90 | 0<br>0       |
| WR  | GRCA | Colorado River Flow Gaging for Glen Canyon Environmental Studies  | Hart, Mr. R. J.<br>U.S. Geological Survey<br>Water Resources Division<br>2255 North Gemini Drive<br>Flagstaff, AZ<br>86001 Phone: (602)527-5270                     | 0      | 00/99 | 0<br>0       |
| WR  | GRCA | A Survey of Paleosols in the Grand Canyon   | Holland, Dr. H. D.<br>Harvard University<br>Dept. of Earth & Planetary Sciences<br>Hoffman Laboratory, 20 Oxford St.<br>Cambridge, MA<br>02138 Phone: (617)495-2351 | 0      | 00/99 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | GRCA | Tectonic Geomorphology of the Toroweap Fault, Western Grand Canyon, Arizona  | Jackson, Mr. G.<br>University of Arizona<br>Department of Geosciences<br>Tucson, AZ<br>85721 Phone: (602)523-2562  | 90     | 03/90 | 0<br>18,000   |
| WR  | GRCA | Northern Arizona University Research on Precambrian Rocks of the Grand Canyon and the Transition from the Colorado Plateau to the Basin and Range Province.    | Karlstrom, Dr. K. E.<br>Northern Arizona University<br>Department of Geology<br>P.O. Box 6030<br>Flagstaff, AZ<br>86011-6030 Phone: (602)523-4561          | 65     | 06/92 | 0<br>0        |
| WR  | GRCA | Proposed Seismic Recording in the Grand Canyon National Park, Arizona  | McCarthy, Dr. J.<br>U.S. Geological Survey<br>Earthquakes, Volcanoes, Engineering<br>345 Middlefield Road; Mail Stop 977<br>Menlo Park, CA<br>94025 Phone: | 50     | 09/92 | 0<br>0        |
| WR  | HALE | Biosystematics of Gunnera (Gunneraceae) in the Hawaiian Islands.   | Doyle, Dr. M. F.<br>Rancho Santa Ana Botanic Garden<br>1500 North College Avenue<br>Claremont, CA<br>91711 Phone: (714)625-8767                            | 90     | 01/92 | 0<br>2,000    |
| WR  | HALE | Vegetation Analysis on the Wet Slope of Mount Haleakala---Island Species Distribution Patterns in Comparison to a Continental Tropical High Mountain System--- | Kitayama, Mr. K.<br>3190 Maile Way<br>Honolulu, HI<br>96822 Phone: (808)948-8044   | 70     | 12/90 | 0<br>3,000    |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| WR  | HALE | Isozyme variation in strawberry guava.   | Manshardt, Dr. R. M.<br>University of Hawaii at Manoa<br>St. John Plant Science Lab 102<br>3190 Maile Way<br>Honolulu, HI<br>96822 Phone: (808)948-8044 | 100    | 10/89 | 500<br>3,000  |
| WR  | HALE | Assessment of Potential Impact of<br>Diachasmimorpha tryoni on Non-Target<br>Organisms | Wong, Mr. T.<br>Agricultural Research Service<br>P.O. Box 2280<br>Honolulu, HI<br>96804 Phone: (808)988-2158  | 70     | 12/90 | 0<br>20,000   |
| WR  | HAVO | Vesiculation of the Kilauea Caldera lava<br>pond of July 1974.                         | & Roger Dealinger, R. H.<br>Washington University<br>U.S. Geological Survey<br>School of Oceanography WB-10<br>Seattle, WA<br>98195 Phone:              | 0      | 00/99 | 0<br>3,000    |
| WR  | HAVO | Plant-Ant Associations   | Black, H.<br>Brigham Young University<br>Department of Zoology<br>W1DB 537<br>Provo, UT<br>84602 Phone: (801)378-4553                                   | 0      | 00/99 | 0<br>0        |
| WR  | HAVO | Small mammals; Alien plant herbicide project   | Cuddihy, Ms. L. W.<br>Hawaii Volcanoes National Park<br>P.O. Box 994<br>Volcano, HI<br>96785 Phone: (808)967-7737                                       | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| WR  | HAVO | General collection / Geology-Physical Science   | Dooley, R. L.<br>Gavilan College<br>5055 Santa Teresa Blvd.<br>Gilroy, CA<br>95020 Phone:                                 | 0      | 00/99 | 0<br>500     |
| WR  | HAVO | Reproductive isolation and genetic variation in two Honeycreeper Taxa   | Fleischer, Mr. R.<br>University of North Dakota<br>Department of Biology<br>Grand Forks, ND<br>58202 Phone: (701)777-3439 | 80     | 06/90 | 0<br>11,300  |
| WR  | HAVO | Patterns of host utilization and range expansion of the Mediterranean fruit fly in Hawaii Volcanoes National Park | Foote, Mr. D.<br>University of California<br>Department of Genetics<br>Davis, CA<br>95616 Phone: (916)752-0200            | 50     | 07/90 | 0<br>10,000  |
| WR  | HAVO | Leaf Pubescence of <i>Metrosideros polymorpha</i> (including other morphological leaf characteristics)            | Geeske, Mr. J.<br>Stanford University<br>Department of Biological Sciences<br>Stanford, CA<br>94309 Phone: (415)725-1858  | 90     | 09/89 | 0<br>0       |
| WR  | HAVO | Adaptive Radiation in the Hawaiian spider genus, <i>Tetragnatha</i>   | Gillespie, Ms. R. G.<br>University of Hawaii-Manoa<br>Department of Zoology<br>Honolulu, HI<br>96822 Phone: (615)598-6146 | 0      | 00/99 | 0<br>400     |



| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| WR  | HAVO | Isolation of Entomopathogenic Nematodes in the Hawaiian Islands | Hara, Mr. A. H.<br>University of Hawaii<br>Beaumont Experimental Station<br>461 W. Lanikaula St<br>Hilo, HI<br>96720 Phone:                     | 10     | 11/90 | 0<br>0       |
| WR  | HAVO | Evolutionary studies on native Hawaiian arthropods              | Hoch, H.<br>Bishop Museum<br>Department of Entomology<br>P.O. Box 1900-A<br>Honolulu, HI<br>96817 Phone: (808)848-4165                          | 20     | 00/99 | 0<br>23,000  |
| WR  | HAVO | Vesiculation of the Kilauea Caldera lava pond of July 1974      | Holcomb, R.<br>University of Washington<br>School of Oceanography WB-10<br>U.S. Geological Survey<br>Seattle, WA<br>98195 Phone:                | 0      | 00/99 | 0<br>3,000   |
| WR  | HAVO | Laboratory culture of ( <i>Exalloscaptomyza caliginosa</i> )    | Keneshiro, Dr. K.<br>University of Hawaii<br>Hawaiian Evolutionary Biology Prog.<br>3050 Maile Way, Gilmore 310<br>Honolulu, HI<br>96822 Phone: | 10     | 00/99 | 0<br>20      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| WR  | HAVO | Karyology of Rubiaceae and Gesnenaceae of the Hawaiian Islands  | Kiehn, Dr. M.<br>Bishop Museum<br>Botany Department<br>P.O. Box 1900-A<br>Honolulu, HI<br>90817 Phone:          | 25     | 12/90 | 0<br>700         |
| WR  | HAVO | Collaborative research on the role of Myrica Faya in altering primary succession in Hawaii Volcanoes National Park. Ecosystem constraints to Myrica invasion. | Lipp, Ms. C.<br>Hawaii Volcanoes National Park<br>P.O. Box 994<br>Volcano, HI<br>96785 Phone: (808)967-7737     | 45     | 09/90 | 0<br>0           |
| WR  | HAVO | Control of Western yellowjacket in Haleakala & Hawaii Volcanoes National Parks to protect endemic biota   | Loope, L.<br>Haleakala National Park<br>P.O. Box 369<br>Makawao, HI<br>96718 Phone: (808)572-1983               | 85     | 09/90 | 10,000<br>41,800 |
| WR  | HAVO | Control of Western yellowjacket in Haleakala & Hawaii Volcanoes National Parks to protect endemic biota   | Loope, Dr. L.<br>Haleakala National Park<br>Box 369<br>Makawao, HI<br>96768 Phone: (808)572-1983                | 85     | 09/90 | 10,000<br>41,800 |
| WR  | HAVO | Ecosystem Threats Study   | Loope, Dr. L. L.<br>Hawaii Volcanoes National Park<br>P.O. Box 994<br>Volcano, HI<br>96785 Phone: (808)967-7737 | 90     | 09/90 | 31,000<br>0      |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$   |
|-----|------|--|--|--------|-------|-----------------|
| WR  | HAVO | Ant/Wasp Control Study   | Loope, Dr. L. L.<br>Hawaii Volcanoes National Park<br>P.O. Box 994<br>Volcano, HI<br>96785 Phone:  | 60     | 12/90 | 8,000<br>42,600 |
| WR  | HAVO | Survey of Isozyme Variation in Strawberry Guava  | Manshardt, Dr. R. M.<br>University of Hawaii<br>Department of Horticulture<br>3190 Maile Way<br>Honolulu, HI<br>96822 Phone: (808)948-6063                     | 100    | 10/89 | 500<br>3,000    |
| WR  | HAVO | Systematic and populational studies of Hawaiian ferns                                    | Ranker, Mr. T.<br>University of Hawaii at Manoa<br>Hawaiian Evolutionary Biology Progm<br>3050 Maile Way, Rm 310<br>Honolulu, HI<br>96822 Phone: (808)948-8884 | 0      | 00/99 | 0<br>17,000     |
| WR  | HAVO | Methods of determination of the Paleointensities of the Earth's magnetic field           | Roperch, P.<br>Oregon State University<br>College of Oceanography<br>Ocean Admin. Building 104<br>Corvallis, OR<br>97331-5503 Phone:                           | 0      | 00/99 | 0<br>0          |
| WR  | HAVO | The evolutionary genetics of acoustical communication in the Hawaiian swordtail cricket. | Shaw, K.<br>Washington University<br>Department of Biology<br>Campus Box 1137<br>St. Louis, MO<br>63130 Phone:   | 10     | 06/92 | 0<br>11,950     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| WR  | HAVO | The evolutionary genetics of acoustical communications in the Hawaiian swordtail cricket | Shaw, K.<br>Washington University<br>Campus 1137<br>Department of Biology<br>St. Louis, MO<br>63130 Phone:  | 10     | 06/92 | 0<br>11,950   |
| WR  | HAVO | Rock Collection  | Sim, B. L.<br>Telfer Gold Mine<br>Telfer 6762<br>Western Australia, Australia   | 100    | 09/89 | 0<br>0        |
| WR  | HAVO | Biology of Endemic Arthropods in Hawaii (Neuroptera)                                     | Tauber, Mr. M. J.<br>Cornell University<br>Department of Entomology<br>Ithaca, NY<br>14853-0999 Phone:  | 0      | 00/90 | 0<br>0        |
| WR  | HAVO | Dispersal of Mediterranean Fruit Fly Using Rubidium as as Internal Physiological Marker  | VanSteenwyk, Dr. R. A.<br>University of California<br>Dept. of Entomological Sciences<br>201 Wellman Hall<br>Berkeley, CA<br>94720 Phone: (415)642-5565 | 100    | 10/89 | 0<br>1,000    |
| WR  | HAVO | Propagation of Touchardia latifolia Guad. by meristem culture.                           | Yoshina, Mr. L. H.<br>Panaewa Rainforest Zoo<br>25 Aupuni St<br>Hilo, HI<br>96720 Phone:  | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | HOMO | Evolutionary studies on native Hawaiian arthropods: Behavioral ecology of surface-dwelling and cavernicolous planthoppers (Insecta: Homoptera: Fulgoroidea: Cixiidae, Delphacidae) | Hoch, Dr. H.<br>Bishop Museum<br>Department of Entomology<br>P.O. Box 19000-A<br>Honolulu, HI<br>96817<br>Phone: (808)847-3511 | 20     | 00/00 | 0<br>23,000  |
| WR  | JOTR | Effects of Air Pollution on Cryptogamic Crusts   | Belnap, J.<br>National Park Service<br>125 W. 2nd So.<br>Moab, UT<br>84532<br>Phone: (801)259-7164                             | 90     | 11/90 | 0<br>1,110   |
| WR  | JOTR | Effects of Air Pollution on Cryptogamic Crusts   | Belnap, J.<br>National Park Service<br>125 W. 2nd So.<br>Moab, UT<br>84532<br>Phone: (801)259-7164                             | 90     | 11/90 | 0<br>1,110   |
| WR  | JOTR | A multidimensional analysis of geographic variation in the Plain Titmouse ( <i>Parus inornatus</i> )   | Cicero, C.<br>University of California<br>2444 Hilgard Ave, #5<br>Berkley, CA<br>94709<br>Phone:                               | 15     | 04/92 | 0<br>0       |
| WR  | JOTR | Aculeate Hymenoptera (and their predators); pollination biology- especially of Lotus species   | Cooper, Dr. K. W.<br>University of California<br>4497 Picacho Dr.<br>Riverside, CA<br>92507-4873<br>Phone:                     | 10     | 00/99 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | JOTR | Environmental Factors Affecting the Population Dynamics of the Joshua Tree, Yucca brevifolia Engelmann | Cornett, J. W.<br>Palm Springs Desert Museum<br>101 Museum Dr<br>Palm Springs, CA<br>92262 Phone:  | 10     | 02/98 | 0<br>0       |
| WR  | JOTR | Butterfly Survey of Joshua Tree National Monument  | Emmel, Dr. J.<br>26500 Rim Road<br>Hemet, CA<br>92344 Phone: Emmel   | 65     | 11/93 | 0<br>0       |
| WR  | JOTR | Arachnids of Joshua Tree   | Hebert, B.<br>Calif. State Univ. Northridge<br>157 N. Allen Ave #2<br>Pasadena, CA<br>91106 Phone: (818)795-5170   | 0      | 00/99 | 0<br>18,000  |
| WR  | JOTR | Joshua Tree air pollution biomonitoring garden   | Heuston, Mr. M.<br>Joshua Tree NM<br>Resource Management Division<br>74485 National Monument Drive<br>Twentynine Palms, CA<br>92277 Phone: (619)367-7511 | 0      | 00/99 | 3,000<br>0   |
| WR  | JOTR | San Mateo Union High School District Desert Ecology Class  | Holm, E.<br>San Mateo High School<br>506 N. Delaware<br>San Mateo, CA<br>94401 Phone:  | 100    | 00/99 | 25,000<br>0  |
| WR  | JOTR | Distribution and Abundance of Desert Tortoise in Joshua Tree National Monument                         | Karl, A. E.<br>1758 N. Academy<br>Sanger, CA<br>93657 Phone: (209)875-6373   | 100    | 12/89 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| WR  | JOTR | Dynamics of the plant communities of Covington Flats                                       | Kornoelje, T. A.<br>17904 Clarkdale<br>Artesia, CA<br>90701 Phone:  | 0      | 00/99 | 0<br>0        |
| WR  | JOTR | A Study of Vegetational Reinvasion Following Natural Fire in Joshua Tree National Monument | Leery, Dr. P. J.<br>Clark County Community College<br>Dept. Science & Health<br>3200 E. Cheyenne<br>Las Vegas, NV<br>89030 Phone: (702)643-6060 | 90     | 00/99 | 0<br>0        |
| WR  | JOTR | Theraphosidae (Tarantulas) of JTNM   | Prentice, T. R.<br>2536 Gonzaga Ln<br>Riverside, CA<br>92507 Phone:   | 60     | 12/90 | 0<br>0        |
| WR  | JOTR | Distribution of Bracheopod Shrimp in Joshua Tree   | Sassaman, C. A.<br>University of California<br>3570 Valencia Hill Dr<br>Riverside, CA<br>92507 Phone:   | 50     | 12/90 | 0<br>0        |
| WR  | JOTR | Revisionary studies of Jerusalem crickets (Stenspelmatius)                                 | Weissman, D. B.<br>15431 Francis Oaks Way<br>Los Gatos, CA<br>95032 Phone:  | 50     | 00/98 | 1<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|--|--|--------|-------|----------------|
| WR  | LABE | Dating geomorphologic surfaces using cosmogenic helium isotopes.   | Cerling, Mr. T. E.<br>Kline Geology Laboratory<br>Department of Geology & Geophysics<br>P.O. Box 6666<br>New Haven, CT<br>06511 Phone: | 20     | 07/91 | 0<br>5,000     |
| WR  | LABE | Cave invertebrate inventory and monitoring at Lava Beds National Monument.   | Crawford, Mr. R.<br>University of Washington<br>Burke Museum (DB-10)<br>Seattle, WA<br>98195 Phone: (206)543-9853                      | 25     | 09/90 | 2,505<br>5,945 |
| WR  | LABE | Studies of the Brazilian Free-tailed Bat, Bat Cave, Lava Beds National Monument: Measuring Population Levels and Influencing Factors Pertaining to Brazilian Free-tailed Bats at Bat Cave. | Cross, Mr. S. P.<br>Southern Oregon State College<br>Department of Biology<br>Ashland, OR<br>97520 Phone:                              | 100    | 07/89 | 3,500<br>0     |
| WR  | LABE | Visitation Impact on Crystal Cave, Lava Beds National Monument.  | Denbo, Mr. D. W.<br>Battelle Marine Sciences Lab<br>1800-8 The Bluff<br>Port Angeles, WA<br>98362 Phone: (206)683-4151                 | 70     | 12/90 | 14,010<br>0    |
| WR  | LABE | Medicine Lake volcano (MLV)  | Donnelly-Nolan, Dr. J.<br>U.S. Geological Survey, MS910<br>345 Middlefield Rd.<br>Menlo Park, CA<br>94025 Phone: (415)329-5210         | 95     | 12/93 | 0<br>80,000    |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| WR  | LABE | Photomonitoring of cave resources.   | Frantz, Mr. B.<br>16345 Englewood Ave.<br>Los Gatos, CA<br>95032 Phone: (408)356-8506                          | 10     | 03/92 | 1,378<br>1,700 |
| WR  | LABE | Inventory and monitoring of cave-roosting bats ( <i>Plecotus townsendii</i> ). | Perkins, Mr. J. M.<br>5130 S.W. Idaho<br>Portland, OR<br>97221 Phone: (503)244-6613                            | 50     | 09/90 | 2,490<br>0     |
| WR  | LABE | Cave mapping.  | Sims, Mr. M.<br>505 Roosevelt St.<br>Oregon City, OR<br>97045 Phone: (503)796-3302                             | 20     | 03/92 | 1,910<br>7,576 |
| WR  | LABE | Reconnaissance cave inventory.   | Sims, Mr. M.<br>505 Roosevelt St.<br>Oregon City, OR<br>97045 Phone: (503)796-3302                             | 10     | 03/92 | 924<br>1,920   |
| WR  | LABE | Ice level monitoring.  | Sims, Mr. M.<br>505 Roosevelt St.<br>Oregon City, OR<br>97045 Phone: (503)796-3302                             | 0      | 03/92 | 704<br>1,695   |
| WR  | LABE | General cave resource inventory.   | Sowers, Dr. J.<br>Cave Research Foundation<br>5844 San Jose Ave.<br>Richmond, CA<br>94804 Phone: (415)528-6515 | 10     | 06/92 | 168<br>500     |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | LABE | Monitoring of speleothem breakage.   | Sowers, Dr. J.<br>Cave Research Foundation<br>5844 San Jose Ave.<br>Richmond, CA<br>94804 Phone: (415)528-6515                                   | 20     | 06/92 | 94<br>80     |
| WR  | LABE | Prevalence of Lyme Borreliosis in Rodents and Ticks, Tulelake, CA.   | Theis, Dr. J.<br>University of California<br>School of Medicine<br>Dept. of Med. Microbio. and Immun.<br>Davis, CA<br>95616 Phone: (916)752-3427 | 90     | 12/89 | 0<br>500     |
| WR  | LABE | Dust monitoring and sedimentology.   | Tinsley, Mr. J.<br>Cave Research Foundation<br>1040 Oakland Ave.<br>Menlo Park, CA<br>94025 Phone: (415)327-2368                                 | 10     | 05/92 | 300<br>600   |
| WR  | LAME | Grapevine Mesa Desert Bighorn Sheep Movement Study.  | Cavanaugh, R.<br>Arizona Game and Fish Department<br>2222 West Greenway Road<br>Phoenix, AZ<br>85023 Phone: (602)942-3000                        | 50     | 10/90 | 0<br>0       |
| WR  | LAME | A Study of Desert Bighorn Movements and Habitat use in Relation to the Proposed Black Canyon Bridge (Nevada) | Douglas, Dr. C.<br>University of Nevada<br>Department of Biological Sciences<br>Las Vegas, NV<br>89154 Phone: (702)739-3219                      | 33     | 12/91 | 0<br>0       |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | LAME | Development of computer simulation model of river mountain herd, Lake Mead National Recreation Area.                 | Douglas, Dr. C. L.<br>NPS Coop. Park Studies Unit<br>University of Nevada<br>Dept. of Biology<br>Las Vegas, NV<br>89154 Phone: (702)739-3219 | 75     | 00/99 | 0<br>0       |
| WR  | LAME | An Investigation of Desert Bighorn Sheep Movements in Relation to The Proposed Black Canyon Bridge Project (Arizona) | Glinski, R.<br>2222 West Greenway Road<br>Phoenix, AZ<br>85023 Phone: (602)942-3000  | 10     | 08/91 | 0<br>0       |
| WR  | LAME | Aquatic Cover Enhancement  | Haley, J. S.<br>Nevada Department of Wildlife<br>State of Nevada<br>Mailroom Complex<br>Las Vegas, NV<br>89158 Phone: (702)486-5127          | 0      | 00/99 | 0<br>0       |
| WR  | LAME | Food Habits and Food Resources of Bighorn in the River Mountains, Lake Mead National Recreation Area                 | Longshore, K.<br>University of Nevada<br>Dept. of Biology<br>Las Vegas, NV<br>89154 Phone: (702)739-3122                                     | 80     | 00/99 | 0<br>0       |
| WR  | LAME | Desert Tortoise Distribution and Abundance, Lake Mead National Recreation Area.                                      | Niles, Dr. W.<br>University of Nevada<br>Department of Biological Sciences<br>Las Vegas, NV<br>89154 Phone:                                  | 50     | 00/99 | 0<br>0       |

| Reg | Park | Project Title                                 | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| WR  | LAME | Lake Mead Artificial Fertilization Experiment | Paulson, Dr. L. J.<br>University of Nevada<br>Environmental Research Center<br>4505 S. Maryland Parkway<br>Las Vegas, NV<br>89109 Phone: (702)739-3381 | 85     | 07/90 | 0<br>0        |
| WR  | LAME | Lake Mead Cover Enhancement Project           | Paulson, Dr. L. J.<br>University of Nevada<br>Environmental Research Center<br>4505 S. Maryland Parkway<br>Las Vegas, NV<br>89109 Phone: (702)739-3381 | 100    | 12/89 | 0<br>0        |
| WR  | LAME | Water Quality Monitoring in Lake Mead.        | Paulson, Dr. L. J.<br>University of Nevada<br>Environmental Research Center<br>4505 S. Maryland Parkway<br>Las Vegas, NV<br>89109 Phone: (702)739-3381 | 100    | 12/89 | 0<br>0        |
| WR  | LAME | Trace Element Analysis of Bighorn Sheep Horns | Weigel, P. G.<br>P.O. Box 74<br>Antelope, OR<br>97001 Phone:   | 100    | 12/89 | 0<br>0        |
| WR  | LAVO | Fungi of Lassen Volcanic National Park        | Cooke, Dr. W. B.<br>1135 Wilshire Court<br>Cincinnati, OH<br>45230 Phone: (513)231-8439  | 0      | 00/00 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | LAVO | Geoecology and Process Geomorphology of Talus and Debris Slopes in Lassen Volcanic National Park     | Perez, Dr. F. L.<br>University of Texas<br>Department of Geography<br>Austin, TX<br>78712 Phone: (512)471-5116                     | 75     | 08/92 | 0<br>7,500    |
| WR  | LAVO | Forest Change in Lassen Volcanic National Park   | Taylor, Dr. A. H.<br>University of Maryland-Balt. Campus<br>Department of Geography<br>Baltimore, MD<br>21228 Phone: (301)455-3149 | 75     | 08/91 | 0<br>6,000    |
| WR  | ORPI | Monitoring impact of ground-water development  | U.S. Geological Survey<br>Arizona District   | 0      | 00/99 | 17,600<br>0   |
| WR  | ORPI | Intensive Archeological Inventory Survey of Selected Portions of Organ Pipe Cactus National Monument | Anderson, Dr. K. M.<br>W.A.C.C.<br>Tucson, AZ  | 1      | 08/89 | 0<br>0        |
| WR  | ORPI | Southwest Boll Weevil Eradication Program  | Antilla, Mr. L.<br>SW Boll Weevil Eradication Project<br>P.O. Box 820<br>El Centro, CA<br>92244 Phone:                             | 66     | 00/91 | 0<br>0        |
| WR  | ORPI | Land Use Trends Surrounding Organ Pipe Cactus National Monument                                      | Brown, Mr. B.<br>Great Western Research<br>1601 E. McKellips<br>Mesa, AZ<br>85203 Phone: (602)962-0968                             | 90     | 03/90 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| WR  | ORPI | Investigate and Control Accelerated Erosion   | Brown, Mr. B.<br>Great Western Research<br>1601 E. McKellips<br>Mesa, AZ<br>85203 Phone: (602)962-0968                                 | 100    | 06/89 | 7,900<br>0    |
| WR  | ORPI | Monitor Mexican Urbanization and Agricultural Development   | Brown, Mr. B.<br>Great Western Research<br>1601 E. McKellips<br>Mesa, AZ<br>85203 Phone: (602)962-0968                                 | 50     | 12/90 | 8,000<br>0    |
| WR  | ORPI | Study European Honey Bee Pollination  | Buckmann, Dr. S. L.<br>USDA-ARS<br>Carl Hayden Bee Research Center<br>2000 East Allen Road<br>Tucson, AZ<br>85719 Phone: (602)629-6709 | 40     | 12/91 | 0<br>0        |
| WR  | ORPI | Geochemistry of Arid - Zone Infiltration  | Claassen, Dr. H. C.<br>US Geological Survey, WRD<br>Box 25046, MS 412<br>Denver Federal Center<br>Denver, CO<br>80225 Phone:           | 5      | 00/94 | 0<br>190,000  |
| WR  | ORPI | The Effects of Variation in Seasonal Precipitation on the Clutch Size and Fledgling Success of the Greater Roadrunner, <i>Geococcyx californianus</i> | Cornett, Dr. J. W.<br>Palm Springs Desert Museum<br>P.O. Box 2288<br>101 Museum Drive<br>Palm Springs, CA<br>92263 Phone:              | 16     | 05/92 | 0<br>3,500    |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | ORPI | Biochemical Systematics of Pupfishes  | Echelle, Dr. A. A.<br>Oklahoma State University<br>Dept. of Zoology<br>Stillwater, OK<br>74078 Phone:   | 20     | 01/92 | 0<br>130,000  |
| WR  | ORPI | Conduct Inventory and Assessment:<br>Non-Native Plants of Organ Pipe Cactus<br>National Monument  | Felger, Dr. R.<br>2003 E. 4th. Street<br>Tucson, AZ<br>85719 Phone: (602)624-7888   | 90     | 08/90 | 9,900<br>0    |
| WR  | ORPI | Survey of Bacteria Associated with Necrotic<br>Cactus Tissues   | Fogleman, Dr. J.<br>University of Denver<br>Department of Biological Sciences<br>Denver, CO<br>80208 Phone:                                   | 80     | 06/90 | 0<br>18,600   |
| WR  | ORPI | Investigations into the Distribution and<br>Status of <i>Agave schottii</i> Engelm. var.<br><i>treleasei</i> (Toumey) K. & P. in Organ Pipe<br>Cactus National Monument | Hodgson, Ms. W.<br>Desert Botanical Garden<br>1201 N. Galvin Parkway<br>Phoenix, AZ<br>85008 Phone: (602)941-1225                             | 0      | 12/91 | 0<br>0        |
| WR  | ORPI | Sonoran Pronghorn Habitat Use   | Hughes, Mr. K. S.<br>AZ Coop. Fish & Wildlife Research<br>210 Biological Sciences East<br>University of Arizona<br>Tucson, AZ<br>85721 Phone: | 75     | 12/89 | 0<br>30,000   |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| WR  | ORPI | Death in Saguaro Associates   | Hutto, Dr. R. L.<br>University of Montana<br>Division of Biological Sciences<br>Dept. of Zoology<br>Missoula, MT<br>59812 Phone: (406)243-5122 | 100    | 03/89 | 0<br>400     |
| WR  | ORPI | Special Status Avian Species at Organ Pipe Cactus National Monument.  | Johnson, Dr. R. R.<br>National Park Service<br>P.O. Box 41058<br>1415 N. 6th Ave.<br>Tucson, AZ<br>85717 Phone: (602)670-6896                  | 90     | 12/90 | 0<br>0       |
| WR  | ORPI | Conduct Inventory and Assessment: Birds   | Johnson, Dr. R. R.<br>National Park Service<br>CPSU/University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85718 Phone: (602)629-6886        | 90     | 08/90 | 15,000<br>0  |
| WR  | ORPI | Reproductive Ecology and Natural History of <i>Acuna Cactus</i> , <i>Echinomastus erectocentrus</i> var. <i>acunensis</i> | Johnson, Dr. R. A.<br>6519 S. Rita Lane<br>Tempe, AZ<br>85283 Phone:   | 100    | 12/89 | 0<br>4,840   |
| WR  | ORPI | Ecology of Invertebrates of Organ Pipe Cactus National Monument   | Kingsley, Dr. K. J.<br>3801 N. Swan<br>Tucson, AZ<br>85718 Phone: (602)577-8639  | 66     | 09/90 | 0<br>0       |



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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|--|--|--------|-------|------------------|
| WR  | ORPI | Statewide Environmental Radiation Monitoring Program   | Lamb, Mr. J. E.<br>AZ Radiation Regulatory Agency<br>Environmental Surveillance Lab.<br>4814 South 40th St.<br>Phoenix, AZ<br>85040 Phone: | 0      | 00/99 | 0<br>0           |
| WR  | ORPI | Vegetation Structure and Diversity in Natural Populations at Organ Pipe Cactus National Monument, Arizona  | Lowe, Dr. C. H.<br>University of Arizona<br>Dept. of Ecology & Evol. Biology<br>Tucson, AZ<br>85721 Phone:                                 | 50     | 03/91 | 49,312<br>7,500  |
| WR  | ORPI | Ecology of the Amphibians and Reptiles of Organ Pipe Cactus National Monument                              | Lowe, Dr. C. H.<br>University of Arizona<br>Dept. of Ecology & Evol. Biology<br>Tucson, AZ<br>85721 Phone: ( ) -                           | 67     | 12/90 | 55,012<br>14,375 |
| WR  | ORPI | Population Status, Foraging Behavior and Reproductive Biology of the Leafcutting Ant, <i>Atta mexicana</i> | Mintzer, Dr. A. C.<br>1550 S. Marmora<br>Tucson, AZ<br>85713 Phone: (602)624-6283  | 70     | 00/99 | 0<br>6,600       |
| WR  | ORPI | Genetic and Morphological Studies of the Desert Pupfish, <i>Cyprinodon macularius</i> .                    | Mitton, Dr. J. B.<br>University of Colorado<br>122 Ramaley<br>Campus Box 334<br>Boulder, CO<br>80309 Phone: (303)492-8956                  | 50     | 07/90 | 0<br>0           |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$  |
|-----|------|--|--|--------|-------|----------------|
| WR  | ORPI | Pilot Demonstration of Ethnobotanical input into the NPFLORA Data Base for the Desert Biosphere Reserves (Organ Pipe and Big Bend) | Nabhan, Dr. G. P.<br>Desert Botanical Garden<br>1201 N. Galvin Parkway<br>Phoenix, AZ<br>85008 Phone: (602)941-1225    | 80     | 06/90 | 8,000<br>5,500 |
| WR  | ORPI | Conduct Inventory and Assessment: Small Mammals  | Petryszyn, Dr. Y.<br>University of Arizona<br>3018 N. Edith Blvd.<br>Tucson, AZ<br>85716-1605 Phone: (602)621-7291     | 90     | 07/90 | 9,500<br>0     |
| WR  | ORPI | Research: Leptonycteris sanborni   | Petryszyn, Dr. Y.<br>University of Arizona<br>3028 N. Edith Blvd.<br>Tucson, AZ<br>85716-1605 Phone: (602)621-7291     | 0      | 07/90 | 0<br>0         |
| WR  | ORPI | Special Status Plants - Organ Pipe Cactus National Monument  | Ruffner, Dr. G. A.<br>212 S. Marina<br>Prescott, AZ<br>86303 Phone: (602)258-1724                                      | 75     | 09/90 | 20,297<br>0    |
| WR  | ORPI | Ecology of Feral and Africanized Honey Bees in Organ Pipe Cactus National Monument   | Schmidt, Dr. J. O.<br>Carl Hayden Bee Research Center<br>USDA - ARS<br>2000 E. Allen Rd.<br>Tucson, AZ<br>85719 Phone: | 50     | 09/91 | 0<br>3,000     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | ORPI | A Study of the Effects of Climate Change, Mountain Range Elevation, and Drainage Basin Lithology on the Formation of Alluvial Fans in Organ Pipe Cactus National Monument, Arizona | Simpson, Mr. D. T.<br>University of New Mexico<br>Dept. of Geology, Northrop Hall<br>Albuquerque, NM<br>87131 Phone: (505)277-3214      | 40     | 09/90 | 0<br>10,350  |
| WR  | ORPI | A Study of the Occurrence and Habitat Utilization of <i>Rothschildia cincta</i> (Tepper) (Saturniidae:Lepidoptera) in OPCNM  | Tuttle, Mr. J. P.<br>The Lepidopterists' Society<br>3838 Fernleigh Ave.<br>Troy, MI<br>48083 Phone: (313)689-6687                       | 50     | 01/90 | 0<br>0       |
| WR  | ORPI | Further Packrat Midden Studies in Organ Pipe Cactus National Monument  | Van Devender, Dr. T. R.<br>Arizona-Sonora Desert Museum<br>2021 N. Kinney Road<br>Tucson, AZ<br>85743 Phone: (602)883-1380              | 100    | 07/89 | 0<br>4,141   |
| WR  | ORPI | Study Boundary Vegetation Patterns   | Warren, Mr. P. L.<br>The Arizona Nature Conservancy<br>300 E. University Blvd.<br>Suite 230<br>Tucson, AZ<br>85705 Phone: (602)622-3861 | 90     | 09/90 | 27,000<br>0  |
| WR  | ORPI | Investigate Ecosystem Recovery from Past Cattle Grazing  | Warren, Mr. P. L.<br>The Arizona Nature Conservancy<br>300 E. University Blvd.<br>Suite 230<br>Tucson, AZ<br>85705 Phone: (602)622-3861 | 90     | 09/90 | 10,000<br>0  |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|--|---|--------|-------|---------------|
| WR  | PEFO | Plant Biostratigraphy and Upper Triassic Paleoclimatology of Petrified Forest National Park, Arizona | Ash, Dr. S. R.<br>Weber State College<br>Dept. of Geology<br>Ogden, UT<br>84408-2507 Phone: (801)626-6908   | 50     | 00/99 | 0             |
| WR  | PEFO | Ambient Air Quality Monitoring   | Bowman, Mr. C. B.<br>National Park Service<br>Petrified Forest National Park<br>P.O. Box 217<br>Petrified Forest NP, AZ<br>86028 Phone: (602)524-6228 | 0      | 00/99 | 0             |
| WR  | PEFO | Astragalus xiphoides (Gladiator Milk Vetch) Survey   | Bowman, Mr. C. B.<br>National Park Service<br>Petrified Forest National Park<br>P.O. Box 217<br>Petrified Forest NP, AZ<br>86028 Phone: (602)524-6228 | 25     | 00/99 | 0             |
| WR  | PEFO | Control of salt cedar (Tamarix ramossisima) in Petrified Forest National Park                        | Bowman, Mr. C. B.<br>National Park Service<br>Petrified Forest National Park<br>P.O. Box 217<br>Petrified Forest NP, AZ<br>86028 Phone: (602)524-6228 | 75     | 09/90 | 0             |
| WR  | PEFO | Volcanic hazard studies for the Yucca Mountain Project   | Crowe, B.<br>Los Alamos Yucca Mountain Project<br>Suite 860<br>101 Convention Center Drive<br>Las Vegas, NV<br>89109 Phone:                           | 60     | 09/95 | 0             |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | WPS3/Other3 |
|-----|------|--|---|--------|-------|-------------|
| WR  | PEFO | Lichens of the Petrified Forest National Park  | Davis, Mr. W. C.<br>Arizona State University<br>Botany Department<br>Tempe, AZ<br>85287 Phone: (602)965-7735                        | 30     | 06/91 | 0<br>2      |
| WR  | PEFO | Ecology and Social Behavior of Gunnison's Prairie Dogs   | Hoogland, Dr. J. L.<br>University of Maryland<br>Appalachian Environmntl. Laboratory<br>Forstburg, MD<br>21523 Phone: (301)689-3115 | 15     | 06/95 | 0<br>0      |
| WR  | PEFO | Palynostratigraphy of fossil vertebrate sites, Petrified Forest National Park, Arizona   | Litwin, Dr. R. J.<br>U.S. Geological Survey<br>MS 970 National Center<br>Reston, VA<br>22092 Phone: (703)648-5284                   | 0      | 00/99 | 0<br>0      |
| WR  | PEFO | Chalcedony Park: A History of Arizona's Petrified Forest   | Lubick, Dr. G. M.<br>Northern Arizona University<br>History Department<br>Box 6023<br>Flagstaff, AZ<br>86011 Phone:                 | 95     | 05/90 | 0<br>0      |
| WR  | PEFO | Stratigraphic Micropaleontology of the Petrified Forest Member of the Chinle Formation, Petrified Forest National Park, Arizona. | Lucas, Dr. S. K.<br>New Mexico Museum of Natl. History<br>P.O. Box 7010<br>Albuquerque, NM<br>87194-7010 Phone: Lucas               | 40     | 09/90 | 1<br>5      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | PEFO | Kookopolo Project   | Malotki, Dr. E.<br>Northern Arizona University<br>Department of Modern Languages<br>Box 6004<br>Flagstaff, AZ<br>86011 Phone: (602)779-2033 | 5      | 08/92 | 0<br>0        |
| WR  | PEFO | Surface polish study of suspected<br>gastroliths  | Manley, Dr. K.<br>Los Alamos National Laboratory<br>4691 Ridgeway Drive<br>Los Alamos, NM<br>86544 Phone: (505)662-6163                     | 75     | 12/90 | 0<br>0        |
| WR  | PEFO | Vertebrate microfossils, biostratigraphy and<br>paleoecology of the Chinle Formation,<br>Petrified Forest National Park, Arizona                          | Murry, Dr. P. A.<br>Tarleton State University<br>Department of Physical Sciences<br>Stephenville, TX<br>76402 Phone:                        | 50     | 05/90 | 0<br>0        |
| WR  | PEFO | Termite Fossils in Petrified Logs from the<br>Early Mesozoic  | Myles, Dr. T. G.<br>University of Arizona<br>Department of Entomology<br>Tucson, AZ<br>85721 Phone: (602)621-1151                           | 50     | 12/90 | 0<br>0        |
| WR  | PEFO | Depositional Environments and<br>paleogeomorphology of fossil accumulations<br>in the Upper Triassic Chinle Formation,<br>Petrified Forest National Park. | Parrish, Dr. J. M.<br>Northern Illinois University<br>Department of Biological Sciences<br>DeKalb, IL<br>60115 Phone: (815)753-3200         | 50     | 09/91 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | PEFO | Paleoclimatic data obtained from growth rings in fossil trees, Chinle Formation, Petrified Forest National Park                         | Parrish, Dr. J. T.<br>University of Arizona<br>Department of Geosciences<br>Tucson, AZ<br>85721 Phone: (602)621-4595  | 25     | 08/90 | 0<br>0        |
| WR  | PEFO | Neutron Activation Study of Petrified Wood  | Weigand, Dr. P. C.<br>Museum of Northern Arizona<br>Anthropology Department<br>Route 4 Box 720<br>Flagstaff, AZ<br>86001 Phone: (602)774-5211                   | 30     | 12/91 | 0<br>0        |
| WR  | PEFO | Geochemistry, sedimentology and clay minerology of the upper Petrified Forest Member paleosols, Petrified Forest National Park, Arizona | Zuber, Mr. D.<br>Northern Arizona University<br>Geology Department<br>Flagstaff, AZ<br>86011 Phone:   | 90     | 04/90 | 0<br>0        |
| WR  | PORE | Pinnipeds of Point Reyes Peninsula. Biomonitoring of Harbor seals and northern elephant seal populations at Point Reyes.                | Allen, Ms. S. G.<br>Point Reyes Bird Observatory<br>4990 Shoreline Highway<br>Stinson Beach, CA<br>94970 Phone: (415)868-1221                                   | 0      | 00/00 | 0<br>0        |
| WR  | PORE | Song dialects and social interaction in white-crowned sparrows  | Baptista, Dr. L. F.<br>California Academy of Sciences<br>Dept of Ornithology & Mammalogy<br>Golden Gate Park<br>San Francisco, CA<br>94118 Phone: (415)750-7176 | 0      | 00/00 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | PORE | The effects of defoliation by the western Tussock Moth ( <i>Orgyia vetusta</i> ) on the yellow bush lupine ( <i>Lupinus arboreus</i> ) | Bentley, Dr. B.<br>State University of New York<br>Dept. of Ecology & Evolution<br>Stony Brook, NY<br>11794 Phone: (516)632-8589 | 100    | 08/89 | 0<br>80,000  |
| WR  | PORE | Planktonic and benthic invertebrates and algae of Tomales Bay.   | Brumbaugh, Dr. J. H.<br>Sonoma State University<br>Dept of Biology<br>Rohnert Park, CA<br>94928 Phone: (707)539-2219             | 0      | 00/00 | 0<br>200     |
| WR  | PORE | Intrusive Geochronology  | Champion, Dr. D. W.<br>U.S. Geological Survey<br>345 Middlefield Rd<br>Menlo Park, CA<br>94025 Phone: (415)329-4671              | 30     | 00/00 | 0<br>0       |
| WR  | PORE | The study of preservation of the zoogeographical history of the fossil mammals on the Point Reyes Peninsula.                           | Chan, Dr. G. L.<br>College of Marin<br>Biology Department<br>Kentfield, CA<br>94094 Phone: (415)485-9537                         | 0      | 00/00 | 0<br>1,100   |
| WR  | PORE | Autocological and population study of <i>Chorizanthe valida</i> , the Sonoma spineflower.  | Davis, Mr. L.<br>Sonoma State University<br>Biology Department<br>Rohnert Park, CA<br>94928 Phone: (707)664-2189                 | 0      | 00/00 | 0<br>200     |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | PORE | Recovery and necropsy of marine mammal carcasses in and near Point Reyes National Seashore   | Deiter, Id. R. L.<br>288 Mesa Rd<br>P.O. Box 1039<br>Bollinas, CA<br>94924<br>Phone: (415)868-2129                            | 60     | 12/95 | 0<br>12,000  |
| WR  | PORE | Baseline collection of Point Reyes peninsula marine plants.  | Dickey, Ms. K.<br>University of California Herbarium<br>6701 San Pablo Ave.<br>Oakland, CA<br>94702<br>Phone: (415)642-6019   | 20     | 09/92 | 0<br>50      |
| WR  | PORE | Genetic, environmental and maternal influences on grasshopper life histories.  | Dingle, Dr. H.<br>University of California<br>Department of Entomology<br>Davis, CA<br>95616<br>Phone: (916)752-2480          | 50     | 12/91 | 0<br>50,000  |
| WR  | PORE | Biology and host-plant selection of <i>Colletes fulgidus</i> , more particularly pre-adult imprinting to host-flower odors in nest provisions. | Dobson, Dr. H. E.<br>University of California<br>Dept of Integrative Biology<br>Berkeley, CA<br>94720<br>Phone: (415)841-8920 | 60     | 09/92 | 0<br>500     |
| WR  | PORE | Plants as indicators of contact: shifts in land use during the protohistoric period in southern Marin County, California.                      | Duncan, Ms. F. L.<br>Mesa Verde National Park<br>Box 68<br>Mesa Verde, CO<br>81330<br>Phone:                                  | 20     | 12/90 | 0<br>2,300   |

| Reg | Park | Project Title                                  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | PORE | Mountain Beaver Ecology and Distribution       | Fellers, Dr. G. M.<br>National Park Service<br>Point Reyes National Seshore<br>Point Reyes, CA<br>94956 Phone: (415)663-8522 | 60     | 12/92 | 0<br>200      |
| WR  | PORE | Big-eared bat ecology                          | Fellers, Dr. G. M.<br>National Park Service<br>Point Reyes National Seshore<br>Point Reyes, CA<br>94956 Phone: (415)663-8522 | 25     | 03/92 | 0<br>250      |
| WR  | PORE | Movement of the San Andreas Fault              | Galehouse, Dr. J. S.<br>San Francisco State University<br>Geology Department<br>San Francisco, CA<br>94132 Phone:            | 0      | 00/00 | 0<br>1,450    |
| WR  | PORE | Biomonitoring of landbird populations          | Geupel, Dr. G. R.<br>Point Reyes Bird Observatory<br>4990 Shoreline Highway<br>Stinson Beach, CA<br>94970 Phone:             | 0      | 00/00 | 0<br>20,000   |
| WR  | PORE | Population dynamics of coastal scrub landbirds | Geupel, Dr. G. R.<br>Point Reyes Bird Observatory<br>4990 Shoreline Highway<br>Stinson Beach, CA<br>94970 Phone:             | 0      | 00/00 | 0<br>30,000   |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | PORE | Vegetation Patterns in Grasslands of Redwood National Park  | Grenier, K. H.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911  | 100    | 12/89 | 250<br>13,000 |
| WR  | PORE | Successional and seasonal variation of the central and northern California rocky intertidal communities as related to natural and human-induced disturbances. | Hardin, Mr. D.<br>Moss Landing Marine Labs<br>P.O. Box 450<br>Moss Landing, CA<br>93950 Phone: (408)755-8658                              | 0      | 00/00 | 0<br>200,000  |
| WR  | PORE | The role of fog-drip in ground water recharge on the Point Reyes Peninsula  | Ingram, Mr. M.<br>University of California<br>Department of Geology<br>Davis, CA<br>95616 Phone: (916)752-0179                            | 0      | 00/00 | 0<br>700      |
| WR  | PORE | Geochemical Analysis of California Oils   | Kennicutt II, Mr. M. C.<br>Texas A & M University<br>10 S. Graham Rd.<br>College Station, TX<br>77840 Phone: (409)690-0095                | 40     | 12/90 | 0<br>0        |
| WR  | PORE | Ecological studies of Lyme Disease at Point Reyes National Seashore.  | Lane, Dr. R. S.<br>University of California<br>Department of Entomology<br>201 Wellman Hall<br>Berkeley, CA<br>94720 Phone: (415)642-4385 | 0      | 00/00 | 0<br>500      |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | PORE | Pinewood nematode and pitch canker survey<br>81-501  | McCartney, W. O.<br>9201 Thilow Drive<br>Sacramento, CA<br>95826 Phone: (916)363-6360   | 0      | 00/00 | 0<br>209     |
| WR  | PORE | Investigations of the late Quaternary slip<br>rate of the northern San Andreas fault in<br>Marin County. | Niemi, Ms. T. M.<br>Stanford University<br>Geology Department<br>Stanford, CA<br>94305 Phone: (415)723-4754                         | 65     | 12/90 | 0<br>15,000  |
| WR  | PORE | Snowy plover populations at Point Reyes<br>National Seashore.  | Page, Mr. G.<br>Point Reyes Bird Observatory<br>4990 Shoreline Highway<br>Stinson Beach, CA<br>94970 Phone: (415)868-1221           | 90     | 12/89 | 0<br>2,100   |
| WR  | PORE | An assessment of the Point Reyes Region as a<br>bald eagle translocation site.                           | Roemer, Mr. G. W.<br>Institute for Wildlife Studies<br>P.O. Box 127<br>Arcata, CA<br>95521 Phone: (707)822-4258                     | 100    | 01/90 | 19,240<br>0  |
| WR  | PORE | Malaria prevalence in an island bird<br>population   | Super, P. E.<br>University of California<br>Wildlife and Fisheries Biology<br>Davis, CA<br>95616 Phone: (916)752-3355               | 45     | 03/90 | 0<br>800     |
| WR  | PORE | Evolution of self-incompatibility systems of<br><i>Armeria maritima</i> .                                | Verkemans, Dr. X.<br>Universite Libre de Bruxelles<br>Jardin Experimental J. Massart<br>1850 Ch. de Wavre<br>1160 Brussels, Belgium | 0      | 00/00 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| WR  | PORE | Stratigraphic investigations of chert in the Miocene Monterey Formation.  | White, Dr. L.<br>U.S. Geological Survey<br>345 Middlefield Rd<br>MS 144<br>Menlo Park, CA<br>94025 Phone: (415)329-4004                        | 100    | 12/89 | 0<br>100     |
| WR  | REDW | Monitoring of rare, threatened, and endangered plant species at Redwood National Park.                            | Eicher, Ms. A. L.<br>Redwood National Park<br>P.O. Box 7<br>219 Hilton Road<br>Orick, CA<br>95555 Phone: (707)488-2911                         | 0      | 00/00 | 3,000<br>0   |
| WR  | REDW | Long-term monitoring and the effects of prescribed fire on Bald Hills and coastal prairies, Redwood National Park | Hektner, Ms. M. M.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911   | 50     | 00/00 | 20,000<br>0  |
| WR  | REDW | Redwood Creek Estuary Planning and Monitoring   | Hofstra, Mr. T. D.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611 | 50     | 01/99 | 74,000<br>0  |
| WR  | REDW | Bear Habitat Use and Movement Patterns  | Hofstra, Mr. T. D.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611 | 50     | 10/95 | 2,000<br>0   |

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| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|--|--|--------|-------|----------------|
| WR  | REDW | Roosevelt elk research   | Hofstra, Mr. T. D.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611 | 20     | 00/00 | 60,000<br>0    |
| WR  | REDW | Landslide and Stream Erosion Control Studies<br>in Redwood National Park | Klein, Mr. R. D.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611   | 50     | 09/95 | 35,000<br>0    |
| WR  | REDW | Monitoring and Evaluation of Lost Man Creek<br>Dam Removal.              | Ozaki, V.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611          | 50     | 09/91 | 4,200<br>0     |
| WR  | REDW | Long Term Monitoring of Channel Changes in<br>Redwood Creek              | Ozaki, V.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611          | 50     | 01/99 | 15,000<br>0    |
| WR  | REDW | Soil survey, Redwood Creek Area, Redwood<br>National Park                | Popenoe, Mr. J. H.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911   | 95     | 12/90 | 30,000<br>0    |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$     |
|-----|------|--|--|--------|-------|-------------------|
| WR  | REDW | Soil survey, Prairie Creek Area, Redwood National Park   | Popenoe, Mr. J. H.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911                                     | 10     | 12/94 | 4,000<br>0        |
| WR  | REDW | Soil survey of Little Bald Hills area, Redwood National Park   | Popenoe, Mr. J. H.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911                                     | 75     | 12/91 | 5,000<br>0        |
| WR  | REDW | Field trials of compost for revegetation of subsoil in Redwood National Park   | Popenoe, Mr. J. H.<br>Redwood National Park<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911                                     | 95     | 07/90 | 2,000<br>0        |
| WR  | REDW | Dependence of Marbled Murrelets on Old-Growth Redwoods   | Ralph, Mr. C. J.<br>U.S. Forest Service<br>Redwood Sciences Laboratory<br>1700 Bayview Drive<br>Arcata, CA<br>95521 Phone: (707)822-3691 | 50     | 10/90 | 14,000<br>160,050 |
| WR  | REDW | Variation in Annual Acorn Production in the Oregon White Oak ( <i>Quercus garryana</i> ) Woodlands of Redwood National Park. | Reed, Ms. L. J.<br>National Park Service<br>Redwood National Park - SOC<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911         | 60     | 12/90 | 500<br>2,050      |

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| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$   |
|-----|------|---|--|--------|-------|----------------|
| WR  | REDW | Vegetation Sampling in Oregon White Oak<br>(Quercus garryana) Woodlands | Reed, Ms. L. J.<br>National Park Service<br>Redwood National Park - SOC<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911               | 70     | 00/00 | 6,000<br>0     |
| WR  | REDW | Aging and Mapping of Coastal Bluff<br>Vegetation                        | Reed, Ms. L. J.<br>National Park Service<br>Redwood National Park - SOC<br>P.O. Box 7<br>Orick, CA<br>95555 Phone: (707)488-2911               | 50     | 12/99 | 0<br>0         |
| WR  | REDW | Air Quality and Visibility Monitoring                                   | Sacklin, Mr. J. A.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611 | 20     | 12/99 | 9,000<br>3,000 |
| WR  | REDW | Rehabilitation Documentation and Evaluation                             | Sonnevil, Mr. R. A.<br>National Park Service<br>Redwood National Park<br>1125 16th Street<br>Arcata, CA<br>95521 Phone: (707)822-7611          | 55     | 09/99 | 15,000<br>0    |
| WR  | REDW | Coyote Abundance and Food Habits  | Steinberg, Ms. S. L.<br>National Park Service<br>Redwood National Park<br>1125 16th Street<br>Arcata, CA<br>95521 Phone: (707)822-7611         | 65     | 06/91 | 25,000<br>0    |



| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|--|---|--------|-------|--------------|
| WR  | REDW | Land Use Monitoring and Timber Harvest Reviews in the Park Protection Zone | Weaver, Mr. W. E.<br>National Park Service<br>Redwood National Park<br>1125 16th Street, Room 212<br>Arcata, CA<br>95521 Phone: (707)822-7611 | 60     | 09/99 | 10,000<br>0  |
| WR  | SAGU | Effects of air pollution on cryptogamic crusts                             | Belnap, Ms. J.<br>Canyonlands NP<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164  | 90     | 11/90 | 0<br>0       |
| WR  | SAGU | Effects of air pollution on cryptogamic crusts                             | Belnap, Ms. J.<br>Canyonlands National Park<br>125 W. 2nd So.<br>Moab, UT<br>84532 Phone: (801)259-7164                                       | 90     | 11/90 | 0<br>0       |
| WR  | SAGU | Establishment of long term monitoring plots in saguaro cactus.             | Duriscoe, Mr. D.<br>Eridanus Research<br>42403 Sierra Dr.<br>Three Rivers, CA<br>93271 Phone: (209)561-4051                                   | 70     | 06/90 | 0<br>0       |
| WR  | SAGU | Potential impacts of house cats on wildlife in Saguaro National Monument.  | Goldsmith, Dr. A.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-7265                  | 90     | 05/90 | 0<br>0       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| WR  | SAGU | Ecology of desert tortoises in Saguaro National Monument  | Goldsmith, Dr. A.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-7265   | 60     | 01/91 | 148<br>0      |
| WR  | SAGU | Late Cretaceous paleomagnetism of the Tucson Mountains, Pima County, Arizona                      | Hagstrum, Dr. J. T.<br>U.S. Geological Survey<br>345 Middlefield Rd., MS 937<br>Menlo Park, CA<br>94025 Phone: (415)329-4672   | 60     | 09/90 | 0<br>0        |
| WR  | SAGU | Desert Mule Deer and Javelina Movement Studies  | Krausman, Dr. P. R.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-3845 | 75     | 05/90 | 0<br>0        |
| WR  | SAGU | Impact of Exotic Cavity-nesting birds on native cavity-nesting birds in Saguaro National Monument | Mannan, Dr. R. W.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-7283   | 100    | 12/89 | 8,000<br>0    |
| WR  | SAGU | A comparative study of the relationship between morphology and locomotion in iguanid lizards      | Miles, Dr. D. B.<br>Ohio University<br>Department of Zoology<br>Athens, OH<br>45701 Phone: (614)593-2317                       | 70     | 08/91 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| WR  | SAGU | Residents Survey-Saguaro National Monument  | Shaw, Dr. W. W.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-7265   | 10     | 09/91 | 0<br>0        |
| WR  | SAGU | Wildlife Relationships: synthesis and analysis, Saguaro National Monument                           | Shaw, Dr. W. W.<br>University of Arizona<br>School of Renewable Nat. Resources<br>Tucson, AZ<br>85721 Phone: (602)621-7265   | 10     | 03/91 | 0<br>0        |
| WR  | SAGU | Breeding biology of purple martins in saguaro cacti.  | Stutchbury, Ms. B. J.<br>Yale University<br>Department of Biology<br>New Haven, CT<br>06511 Phone: (203)432-3794             | 100    | 08/89 | 0<br>0        |
| WR  | SAGU | Combined phytogram and dendrochronological monitoring of tree growth in response to pollution.      | Telewski, Dr. F. W.<br>University of Arizona<br>Laboratory of Tree Ring Research<br>Tucson, AZ<br>85721 Phone: (602)621-6466 | 50     | 10/90 | 0<br>0        |
| WR  | SAGU | Flora of the Tucson Mountains with emphasis on Tucson Mountain District, Saguaro National Monument. | Van Devender, Dr. T. R.<br>Arizona-Sonora Desert Museum<br>2021 N. Kinney Rd.<br>Tucson, AZ<br>85743 Phone: (602)883-1380    | 60     | 03/91 | 0<br>0        |

| Reg | Park | Project Title                            | Investigator/Address/Phone   | % done | End   | NPSS/Other\$ |
|-----|------|--|--|--------|-------|--------------|
| WR  | SAMO | Operate Cooperative Wildfire Data Center | Plantrich, Mr. R. F.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 10     | 09/99 | 18,300<br>0  |
| WR  | SAMO | Monitor Cliff Nesting Raptors            | Plantrich, Mr. R. F.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 20     | 09/99 | 8,900<br>600 |
| WR  | SAMO | Identify Critical Habitat                | Plantrich, De. R. F.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 60     | 06/90 | 27,660<br>0  |
| WR  | SAMO | Initiate Geographic Information System   | Rose, Mr. P. W.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036      | 10     | 09/99 | 21,826<br>0  |

| Reg | Park | Project Title                           | Investigator/Address/Phone:  | % done | End   | NPSS/Other\$ |
|-----|------|---|--|--------|-------|--------------|
| WR  | SAMO | Monitor Air Quality                     | Seacord, Mr. M. R.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 10     | 09/99 | 19,503<br>0  |
| WR  | SAMO | Determine Rainfall Distribution         | Seacord, Mr. M. R.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 60     | 09/91 | 8,835<br>0   |
| WR  | SAMO | Monitor Water Resources                 | Seacord, Mr. M. R.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 20     | 09/99 | 12,300<br>0  |
| WR  | SAMO | Conduct Endangered and Rare Plant Study | Thomas, Mr. T. W.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036  | 11     | 09/99 | 10,933<br>0  |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS/Other\$     |
|-----|------|--|---|--------|-------|------------------|
| WR  | SAMO | Restore Valley Oak Savana Complex  | Thomas, Mr. T. W.<br>National Park Service<br>Santa Monica Mountains NRA<br>30401 Agoura Road<br>Agoura Hills, CA<br>91301 Phone: (818)597-1036 | 11     | 10/99 | 12,596<br>0      |
| WR  | SEKI | The Biogeography and disturbance history of Sequoiadendron giganteum within Sequoia, Kings Canyon and Yosemite National Parks, California. | Anderson, Dr. R. S.<br>Northern Arizona University<br>Bilby Research Center<br>P.O. Box 6013<br>Flagstaff, AZ<br>86011 Phone:                   | 60     | 08/91 | 48,200<br>20,605 |
| WR  | SEKI | Biosystematics of Raillardella (Asteraceae)  | Baldwin, Mr. B. G.<br>University of California<br>Department of Botany<br>Davis, CA<br>95616 Phone: (916)752-0617                               | 70     | 12/90 | 0<br>2,000       |
| WR  | SEKI | Cartography of Lilburn Cave  | Bosted, Dr. P. E.<br>S.L.A.C.<br>Box 4349 Bin 44<br>Stanford, CA<br>94309 Phone: (415)366-5061  | 75     | 12/93 | 0<br>5,000       |
| WR  | SEKI | Air Pollution Effects on Pine Trees  | Bowers, Mr. K. J.<br>University of California<br>Crocker Nuclear Lab<br>Air Quality Group<br>Davis, CA<br>95616 Phone:                          | 100    | 10/89 | 0<br>1,500       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$ |
|-----|------|---|---|--------|-------|---------------|
| WR  | SEKI | Late Quaternary vegetational history of the Southern Sierra Nevada.                                     | Cole, Dr. K.<br>Indiana Dunes National Lakeshore<br>1100 N. Mineral Springs Rd.<br>Porter, IN<br>46304 Phone: (219)926-7561 | 75     | 12/90 | 0<br>10,000   |
| WR  | SEKI | Butterflies found in Sequoia and Kings Canyon National Parks in the southern Sierra Nevada, California. | Davenport, Mr. K.<br>Natural History Museum of LA County<br>900 Esposition Blvd.<br>Los Angeles, CA<br>90007-4057 Phone:    | 50     | 05/99 | 0<br>250      |
| WR  | SEKI | Studies On The Effect Of Ozone Air Pollution On Pines   | Duriscoe, Mr. D. M.<br>Eridanus Research Associates<br>42403 Sierra Drive<br>Three Rivers, CA<br>93271 Phone: (209)561-4051 | 30     | 06/90 | 0<br>6,000    |
| WR  | SEKI | Effects Of Ozone Of Giant Sequoia Saplings And Trees: Histological and Histochemical Approaches         | Evans, Dr. L. S.<br>Lance S. Evans Inc.<br>14 Spring Street<br>Tarrytown, NY<br>10591 Phone: (914)631-2519                  | 15     | 09/90 | 30,000<br>0   |
| WR  | SEKI | A morphological and anatomical study of leaf development in chamise                                     | Garner, Mr. D. T.<br>University of California<br>Department of Biology<br>Fresno, CA<br>93740-0073 Phone: (209)432-5531     | 15     | 12/90 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NP\$\$/Other\$   |
|-----|------|--|---|--------|-------|------------------|
| WR  | SEKI | Do Spatial Patterns Of Understanding Vegetation In Giant Sequoia-Mixed Conifer Stands Vary After A Fire? | Gebauer, Ms. S. B.<br>Duke University<br>Botany Department<br>139 Biosci Bldg<br>Durham, NC<br>27708<br>Phone: (916)684-6564                              | 60     | 06/90 | 4,300<br>900     |
| WR  | SEKI | Resources Inventory / Geographic Information System for Sequoia and Kings Canyon National Parks          | Graber, Dr. D. M.<br>National Park Service<br>Sequoia & Kings Canyon NP<br>Three Rivers, CA<br>93271<br>Phone: (209)565-3341                              | 50     | 9 /94 | 96,800<br>6,700  |
| WR  | SEKI | Long-term climate variation in the southern Sierra Nevada as reconstructed from tree rings               | Graumlich, Dr. L.<br>University of Arizona<br>Tree-Ring Lab<br>Tucson, AZ<br>85721<br>Phone: (602)621-6465  | 30     | 10/90 | 0<br>3,340       |
| WR  | SEKI | Physiological effects of atmospheric ozone on giant sequoia.   | Grulke, Dr. N. E.<br>USDA Forest Service<br>PSW Forest & Range Experiment Sta.<br>4955 Canyon Crest Dr.<br>Riverside, CA<br>92507<br>Phone: (714)276-6749 | 50     | 04/90 | 36,797<br>47,514 |
| WR  | SEKI | Fire Effects in Blue Oak Woodland of the Southern Sierra Nevada  | Haggerty, Ms. P. K.<br>National Park Service<br>P.O. Box 301<br>Ash Mountain<br>Three Rivers, CA<br>93271<br>Phone: (209)565-3341                         | 50     | 06/90 | 300<br>1,500     |



| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|--|--|--------|-------|------------------|
| WR  | SEKI | Investigation of the Hydrology of Redwood Canyon Karst   | Hess, J. W.<br>Cave Research Foundation<br>Desert Research Institute<br>2505 Chandler Ave., #1<br>Las Vegas, NV<br>8120 Phone: (702)798-8882                     | 50     | 12/92 | 0<br>1,000       |
| WR  | SEKI | Determination of lithospheric structure of the southern Sierra Nevada from teleseismic arrival times.                                  | Jones, Mr. C.<br>California Institute of Technology<br>Seismological Laboratory<br>252-21<br>Pasadena, CA<br>91125 Phone:  | 80     | 11/90 | 0<br>23,000      |
| WR  | SEKI | Tule elk and mule deer seasonal and diet activity patterns   | McCullough, Mr. D. R.<br>University of California<br>Dept. of Forestry & Resource Mgmt.<br>145 Mulford Hall<br>Berkeley, CA<br>94720 Phone:                      | 80     | 08/90 | 0<br>19,590      |
| WR  | SEKI | Effects of atmospheric deposition on the ecosystems of Sequoia and Kings Canyon National Parks. Ecological impact on aquatic habitats. | Melack, Dr. J. M.<br>University of California<br>Dept. of Biological Sciences and<br>Marine Science Institute<br>Santa Barbara, CA<br>93106 Phone: (805)961-3879 | 90     | 06/91 | 7,000<br>100,000 |
| WR  | SEKI | High Country Wasps   | Menke, Dr. A. S.<br>Systematic Entomology Lab., USDA<br>c/o U.S. National Museum<br>Washington, D.C.<br>20560 Phone: (202)382-1803                               | 0      | 08/99 | 0<br>450         |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| WR  | SEKI | Geology of Sequoia and Kings Canyon National Parks  | Moore, Dr. J. G.<br>U.S. Geological Survey<br>345 Middlefield Rd<br>MS-910<br>Menlo Park, CA<br>94025 Phone:                                | 65     | 06/92 | 0<br>1,000       |
| WR  | SEKI | Magnetotelluric Investigation of Central California   | Park, Dr. S.<br>University of California<br>Inst. Geophysics & Planetary Phys<br>Riverside, CA<br>92521 Phone: (714)787-343                 | 80     | 02/90 | 0<br>42,000      |
| WR  | SEKI | Fire ecology of giant sequoia   | Parsons, Dr. D. J.<br>National Park Service<br>Sequoia/Kings Canyon National Parks<br>Three Rivers, CA<br>93271 Phone: (209)565-3341        | 50     | 12/91 | 17,000<br>0      |
| WR  | SEKI | Ozone Impacts on Photosynthesis in Jeffrey Pine   | Patterson, Mr. M. T.<br>Univeristy of California - LA<br>Department of Biology and L.B.E.S.<br>Los Angeles, CA<br>90024 Phone:              | 90     | 10/89 | 3,300<br>0       |
| WR  | SEKI | Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem | Piirto, Dr. D. D.<br>California Polytech. State Univ.<br>Natural Resources Mgmt. Dept.<br>San Luis Obispo, CA<br>93407 Phone: (805)756-2968 | 40     | 12/91 | 36,547<br>14,000 |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$  |
|-----|------|--|--|--------|-------|-----------------|
| WR  | SEKI | Post-fire Vegetation Establishment In Chaparral: The Effects Of Fire Intensity           | Rice, Mr. S.<br>Duke University<br>Botany Department<br>Durham, NC<br>27706<br>Phone: (919)684-2166  | 80     | 04/90 | 500<br>2,850    |
| WR  | SEKI | Effects of Prescribed Burning in Forest Floor Fuels at the Bases of Giant Sequoia Trees. | Sackett, Mr. S. S.<br>USDA-Forest Service<br>Riverside Forest Fire Laboratory<br>4955 Canyon Crest Dr.<br>Riverside, CA<br>92507<br>Phone: ( ) - | 25     | 11/92 | 5,000<br>26,000 |
| WR  | SEKI | Volcanic Eruptive Chronologies From Temperature Sensitive trees                          | Scuderi, Dr. L.<br>Boston University<br>Department of Geography<br>675 Commonwealth Ave<br>Boston, MA<br>02215<br>Phone: (617)353-5985           | 10     | 09/91 | 0<br>4,000      |
| WR  | SEKI | Pedologic studies in relation to soil climate  | Southard, R. J.<br>University of California<br>Dept. Land, Air & Water Resources<br>Davis, CA<br>95616<br>Phone: (916)752-7041                   | 30     | 10/89 | 0<br>15,000     |
| WR  | SEKI | A First Inventory of the Bryophytes of Sequoia and Kings Canyon National Parks           | Steen, Mr. A.<br>University of California<br>Biomedical & Environment Sci. Lab<br>900 Veteran Avenue<br>Los Angeles, CA<br>90024<br>Phone:       | 60     | 12/99 | 0<br>1,000      |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$    |
|-----|------|---|---|--------|-------|------------------|
| WR  | SEKI | Fire and the Forest Dynamics of Giant Sequoias  | Stephenson, Dr. N. L.<br>National Park Service<br>Sequoia National Park<br>Three Rivers, CA<br>93271 Phone: (209)565-3341                                       | 60     | 12/91 | 37,000<br>0      |
| WR  | SEKI | Size Distributions and Spatial Patterns of Giant Sequoia                                    | Stohlgren, Mr. T. J.<br>University of California<br>National Park Service<br>CPSU Wickson Hall<br>Davis, CA<br>95616 Phone: (916)752-3429                       | 30     | 12/91 | 0<br>0           |
| WR  | SEKI | Tree-Ring Reconstruction of Giant Sequoia Fire Regimes                                      | Swetnam, Dr. T. W.<br>University of Arizona<br>Building 58, West Stadium<br>Laboratory of Tree-Ring Research<br>Tucson, AZ<br>85721 Phone: (602)621-2112        | 60     | 6/91  | 65,799<br>17,472 |
| WR  | SEKI | Seasonal Ethylene Production, ozone Sensitivity and Wood Formation in Two Western Conifers. | Telewski, Dr. F. W.<br>University of Arizona<br>Laboratory of Tree-Ring Research<br>Tucson, AZ<br>85721 Phone: (602)621-6466                                    | 100    | 11/89 | 3,600<br>0       |
| WR  | SEKI | Cartography of Surface Features of Redwood Canyon Karst                                     | Tinsley III, Dr. J. C.<br>Cave Research Foundation<br>c/o U.S. Geological Survey<br>345 Middlefield Road MS-975<br>Menlo Park, CA<br>94025 Phone: (415)329-4928 | 40     | 01/93 | 0<br>1,500       |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPS\$/Other\$   |
|-----|------|---|---|--------|-------|-----------------|
| WR  | SEKI | Sedimentology of the Redwood Canyon Karst Area                    | Tinsley III, Dr. J. C.<br>Cave Research Foundation<br>c/o U.S. Geological Survey<br>345 Middlefield Road MS-975<br>Menlo Park, CA<br>94025 Phone: (415)329-4928 | 80     | 12/92 | 0<br>4,000      |
| WR  | SEKI | Regulation of Element Fluxes in Sierran Conifer Forests           | Vitousek, P. M.<br>Stanford University<br>Stanford, CA<br>94305 Phone: (415)725-1866  | 60     | 03/91 | 27,500<br>4,200 |
| WR  | SOAR | Annotated Bibliography SOAR Parks                                 | Alexander, Ms. J. M.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: (602)670-6896                      | 60     | 09/91 | 0<br>0          |
| WR  | TONT | Saguaro Cactus Status At Tonto National Monument                  | Bennett, P. S.<br>NPS-Coop. Park Studies Unit<br>University of Arizona<br>P.O. Box 41058<br>Tucson, AZ<br>85717 Phone: (602)670-6896                            | 70     | 01/91 | 0<br>0          |
| WR  | TONT | Resurvey of 1961 Line Intercept Transects at Tonto Nat'l Monument | Brian, M. J.<br>Route 4, Box 890A<br>Flagstaff, AZ<br>86001 Phone: (602)774-9203  | 100    | 07/89 | 0<br>60,000     |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$  |
|-----|------|--|---|--------|-------|-----------------|
| WR  | TONT | Exotic Plants Inventory  | Phillips, B. G.<br>1603 N. Sunset<br>Flagstaff, AZ<br>86001 Phone: (602)774-5211  | 100    | 02/89 | 6<br>0          |
| WR  | TONT | Vegetation Inventory, Classification and Monitoring - Tonto National Monument  | Reichenbacher, F. W.<br>F.W. Reichenbacher & Associates<br>2739 North La Cienega Drive<br>Tucson, AZ<br>85715-3530 Phone: (602)886-4303 | 75     | 05/90 | 0<br>0          |
| WR  | WACA | Establishment and Development History of Pinyon-Juniper Woodland at Walnut Canyon National Monument.   | Despain, Dr. D. W.<br>University of Arizona<br>Biological Science Bldg - Rm. 325<br>Tucson, AZ<br>85721 Phone:                          | 100    | 12/89 | 0<br>0          |
| WR  | WACA | The Effects of Prescribed Fire on White-footed Mice (Peromyscus Spp.) and Vegetation at Walnut Canyon National Monument.                               | Irvine, Ms. L. R.<br>Northern Arizona University<br>403 S. Leroux<br>Flagstaff, AZ<br>86001 Phone: (602)774-9665                        | 80     | 05/90 | 0<br>0          |
| WR  | WACA | Riparian Inventory of Walnut Canyon National Monument  | Phillips, Dr. B. G.<br>1603 N. Sunset<br>Flagstaff, AZ<br>86001 Phone: (602)779-4208  | 98     | 02/90 | 0<br>0          |
| WR  | YOSE | Study of California Indian Use of Fire-based Management in the Sequoia-mixed Conifer Forest and Adjacent Vegetation Types of the Central Sierra Nevada | Anderson, Ms. K.<br>University of California<br>Dept. of Forestry & Conservation<br>Berkeley, CA<br>94720 Phone: (415)548-9419          | 35     | 09/91 | 24,225<br>8,750 |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|---|--|--------|-------|------------------|
| WR  | YOSE | The Biogeography and Disturbance History of Sequoiadendron giganteum within Sequoia, Kings Canyon and Yosemite Natl. Parks, California. | Anderson, Dr. R. S.<br>Northern Arizona University<br>Bilby Research Center<br>P.O. Box 6013<br>Flagstaff, AZ<br>86011<br>Phone: (602)523-5821 | 60     | 12/91 | 48,200<br>20,605 |
| WR  | YOSE | Genetic Divergence in the Pine Weevils (Genus Pissodes).  | Aquadro, Dr. C. F.<br>Cornell University<br>Genetics and Development<br>Ithaca, NY<br>14853<br>Phone:  | 10     | 08/89 | 0<br>0           |
| WR  | YOSE | Phylogenetic Systematics of Heteroderidae (Nematoda)  | Baldwin, Dr. J. G.<br>University of California<br>Department of Nematology<br>Riverside, CA<br>92521<br>Phone:                                 | 80     | 12/91 | 0<br>91,000      |
| WR  | YOSE | Genetic Diversity in Antennaria Pulchella (ASTERACEAE)  | Bayer, Dr. R. J.<br>University of Alberta<br>Department of Botany<br>Edmonton, Alberta, Canada<br>T6G 2E9<br>Phone:                            | 100    | 6/89  | 0<br>0           |
| WR  | YOSE | Use and perception of Yosemite NP by foreign tourists.  | Berger, Ms. S.<br>Nord Str. 5<br>5300 Bonn 1<br>W. Germany   | 85     | 12/90 | 0<br>0           |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | NPSS\$/Other\$  |
|-----|------|--|---|--------|-------|-----------------|
| WR  | YOSE | Epidemiology of bunyaviruses in the Sierra Nevada                                  | Campbell, Dr. R.<br>University of California<br>140 Earl Warren Hall<br>Berkeley, CA<br>94720 Phone: (415)642-3862              | 75     | 06/90 | 0<br>0          |
| WR  | YOSE | Lee Vining Bighorn Sheep Reintroduction.   | Chow, Mr. L. S.<br>University of California<br>Dept. of Forestry and Natural Res.<br>Berkeley, CA<br>94720 Phone: (209)372-2345 | 75     | 06/90 | 35,400<br>8,000 |
| WR  | YOSE | Visitor Perception and Utilization of Yosemite Natl. Park, California.             | Demars, Dr. S. E.<br>Rhode Island College<br>Anthro/Geography Department<br>Providence, RI<br>02908 Phone: (401)647-3297        | 99     | 06/88 | 0<br>0          |
| WR  | YOSE | Sierra Nevada Batholith.   | Dodge, Dr. F. C.<br>U.S. Geological Survey<br>345 Middlefield Rd.<br>Menlo Park, CA<br>94025 Phone:                             | 10     | 00/00 | 0<br>0          |
| WR  | YOSE | Transport of industrial lead in snow through soil to stream water and groundwater. | Erel, Mr. Y.<br>California Institute of Technology<br>Department of Geosciences<br>Pasadena, CA<br>91125 Phone:                 | 99     | 12/89 | 0<br>0          |



| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|---|--|--------|-------|---------------|
| WR  | YOSE | Spotted owl distribution and abundance in Yosemite National Park  | Gould, Jr., Mr. G. I.<br>California Dept. of Fish and Game<br>1416 Ninth Street<br>Sacramento, CA<br>95814 Phone: (916)322-1263                              | 98     | 12/90 | 0<br>29,600   |
| WR  | YOSE | Tree Ring Evidence for Long-Term Climatic Change  | Graumlich, Dr. L. J.<br>University of Arizona<br>Laboratory of Tree-Ring Research<br>Tucson, AZ<br>85721 Phone: (602)621-6465                                | 70     | 06/90 | 0<br>2,960    |
| WR  | YOSE | A Phylogenetic Revision of the Genera Pimoa Chamberlin & Lvie and LOUISFAGEA BRIGNOLI (ARANEAE, LINYPHIIDAE)  | Hormiga, Mr. G.<br>Smithsonian Institution<br>National Museum of Natural History<br>Department of Entomology<br>Washington, DC<br>20560 Phone: (202)357-4108 | 0      | 00/99 | 0<br>0        |
| WR  | YOSE | Effect of basalt intrusion to microcracks in the Cathedral Peak granite.  | Jang, Mr. B.<br>University of Wisconsin<br>Dept. of Geology & Geophysics<br>1215 West Dayton Street<br>Madison, WI<br>53706 Phone: (608)262-4895             | 10     | 10/90 | 0<br>800      |
| WR  | YOSE | A Genecological Evaluation of Air Pollution Tolerances in Hardwood Trees. Phase 2. Western Parks, Reciprocal Plantings and Field Examinations of Foliar Morphology. | Karnosky, Mr. D. F.<br>Michigan Technological University<br>Houghton, MI<br>49931 Phone:   | 99     | 12/89 | 0<br>0        |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | MPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | YOSE | Reproductive Biology of Manzanita  | Keeley, Dr. J. E.<br>Occidental College<br>Department of Biology<br>Los Angeles, CA<br>90041 Phone: (213)259-2898  | 50     | 00/00 | 0<br>0        |
| WR  | YOSE | Survey of Soils of the Sierra Nevada For<br>Sensitivity to Acid Deposition                                     | Kuh, Ms. L. F.<br>North State Resources, Inc.<br>962 Maraglia Street<br>Redding, CA<br>96002 Phone: (916)222-5347  | 95     | 06/90 | 0<br>150,000  |
| WR  | YOSE | Carbon-13 Measurement  | Lancaster, Mr. J.<br>Scripps Institution of Oceanography<br>2314 Ritter Hall, A-020<br>La Jolla, CA<br>92093 Phone: (619)534-4230                          | 100    | 03/90 | 0<br>0        |
| WR  | YOSE | Analysis of genetic interrelationships of<br>Pedicularis species by DNA restriction<br>mapping and sequencing. | Macior, Dr. L. W.<br>University of Akron<br>Department of Biology<br>Akron, OH<br>44325-3908 Phone: (216)375-7155  | 25     | 12/95 | 0<br>3,000    |
| WR  | YOSE | Population Status of the Yosemite Toad, Bufo<br>canorus  | Martin, Mr. D. L.<br>San Jose State University<br>Dept. of Biological Sciences<br>One Washington Square<br>San Jose, CA<br>95192-0100 Phone: (408)924-4900 | 0      | 00/99 | 0<br>0        |

| Reg | Park | Project Title   | Investigator/Address/Phone  | % done | End   | NPSS/Other\$ |
|-----|------|---|---|--------|-------|--------------|
| WR  | YOSE | Geochemical Mapping - Southern California   | McNeal, Dr. J. M.<br>U.S. Geological Survey<br>Box 25046, MS-925<br>Denver Federal Center<br>Denver, CO<br>80225 Phone:                             | 80     | 00/00 | 0<br>0       |
| WR  | YOSE | Survey of Sensitivity of Lakes in the Sierra Nevada to Acid Precipitation.                  | Melack, Dr. J. M.<br>University of California<br>Department of Biological Sciences<br>Santa Barbara, CA<br>93106 Phone:                             | 50     | 07/91 | 0<br>0       |
| WR  | YOSE | Whirling Disease Distribution in California Salmonid Fish Populations (Myxosoma cerebralis) | Modin, Mr. J. C.<br>California Dept. Fish & Game<br>Fish Diseases Laboratory<br>2111 Nimbus Rd.<br>Rancho Cordova, CA<br>95670 Phone: (916)355-0811 | 25     | 00/00 | 0<br>0       |
| WR  | YOSE | Precipitation Distribution in the Sierra  | Morgan, Dr. D. L.<br>California State University<br>Department of Geography<br>Fresno, CA<br>93740-0069 Phone: (209)294-2678                        | 82     | 07/94 | 0<br>1       |
| WR  | YOSE | Pollination Ecology of a Sierran Sub-alpine Meadow  | Myers, Mr. J. L.<br>California State University<br>2442 Burlington Place<br>Stockton, CA<br>95209 Phone: (209)952-7873                              | 99     | 09/89 | 0<br>3,600   |

| Reg | Park | Project Title  | Investigator/Address/Phone   | % done | End   | NPS\$/Other\$ |
|-----|------|--|--|--------|-------|---------------|
| WR  | YOSE | Gravity and Magnetic Studies, Central Sierra Nevada                                | Oliver, Dr. H. W.<br>U.S. Geological Survey<br>Geologic Division, MS-989<br>345 Middlefield Rd.<br>Menlo Park, CA<br>94025 Phone: (415)329-6031    | 50     | 12/92 | 0<br>15,000   |
| WR  | YOSE | Forest/Environments and Soil/Vegetation Relations in Yosemite National Park        | Parker, Dr. A. J.<br>University of Georgia<br>Department of Geography<br>Athens, GA<br>30602 Phone: (404)542-2368                                  | 100    | 05/89 | 0<br>5,000    |
| WR  | YOSE | Root-disease/bark beetle interactions  | Parmeter, Dr. J. R.<br>University of California<br>Department of Plant Pathology<br>147 Hilgrad Hall<br>Berkeley, CA<br>94720 Phone: (415)642-4763 | 90     | 12/90 | 0<br>0        |
| WR  | YOSE | Yosemite Quadrangle Geologic Mapping   | Peck, Dr. D. L.<br>U.S. Geological Survey<br>101 National Center<br>Reston, VA<br>22092 Phone:   | 90     | 12/95 | 0<br>0        |
| WR  | YOSE | United States Absolute Gravity Network, Yosemite Park Station (Turtleback Dome AA) | Peter, Dr. G.<br>National Geodetic Survey<br>NOAA - N/CG 114<br>Rockwall Bldg. Room 426B<br>Rockville, MD<br>20852 Phone: (703)443-0594            | 70     | 12/99 | 0<br>500,000  |

| Reg | Park | Project Title  | Investigator/Address/Phone  | % done | End   | MPS\$/Other\$    |
|-----|------|--|---|--------|-------|------------------|
| WR  | YOSE | Field Studies of Magmatic Vapor Evolution  | Piccoli, Mr. P. M.<br>University of Maryland<br>Department of Geology<br>Lab. for Mineral Deposits Research<br>College Park, MD<br>20742 Phone: (301)454-3548 | 60     | 06/91 | 0<br>152,500     |
| WR  | YOSE | Biological and Management Implications of Fire/Pathogen Interactions in the Giant Sequoia Ecosystem      | Piirto, Dr. D. D.<br>California Polytech. State Univ.<br>Natural Resources Management Dept.<br>San Luis Obispo, CA<br>93407 Phone: (805)756-2968              | 40     | 12/91 | 36,547<br>14,000 |
| WR  | YOSE | Genetic Structure of Admiral Butterflies   | Porter, Mr. A. H.<br>University of Canterbury<br>Department of Zoology<br>Christchurch 1 - New Zealand<br>Phone: (03 )667-001                                 | 95     | 06/90 | 0<br>5           |
| WR  | YOSE | Ecological Classification of Red Fir   | Potter, Mr. D.<br>U.S. Forest Service, Region 5<br>Stanislaus National Forest<br>19777 Greenley Road<br>Sonora, CA<br>95370 Phone: (209)532-3671              | 85     | 10/91 | 0<br>3,000       |
| WR  | YOSE | The ecology and control of bull thistle, <i>Cirsium vulgare</i> , populations in Yosemite National Park. | Randall, Mr. J. M.<br>University of California<br>Botany Department<br>Davis, CA<br>95616 Phone: (916)752-0617  | 60     | 06/91 | 15,866<br>750    |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|---|--|--------|-------|----------------|
| WR  | YOSE | Ecology & management of <i>Trifolium bolanderi</i> , <i>Calochortus longebarbatus</i> , and <i>Poa fibrata</i> : phenology, growth, and reproduction; and response to defoliation, protection, and specialized grazing. | Ratliff, Dr. R. D.<br>U.S. Forest Service<br>Forestry Sciences Laboratory<br>2081 East Sierra Avenue<br>Fresno, CA<br>93710 Phone: | 0      | 00/99 | 0<br>0         |
| WR  | YOSE | Spatial Distribution of Climatic Data   | Rodgers, Mr. R.<br>P.O. Box 149<br>San Anselmo, CA<br>94960 Phone:   | 0      | 00/99 | 0<br>0         |
| WR  | YOSE | Visitor response to small mammals in Yosemite National Park   | Schlaile, Ms. T. M.<br>University of Montana<br>P.O. Box 9065<br>Missoula, MT<br>59807 Phone: (000)450-5395                        | 100    | 5/89  | 0<br>50        |
| WR  | YOSE | Electrophoretic studies of <i>Colias behrii</i> .   | Shapiro, Dr. A. M.<br>University of California<br>Department of Zoology<br>Davis, CA<br>95616 Phone:                               | 90     | 08/90 | 0<br>0         |
| WR  | YOSE | Ecology of <i>Euphydryas</i> butterflies, and the evolution of diet.  | Singer, Dr. M. C.<br>University of Texas<br>Department of Zoology<br>Austin, TX<br>78712 Phone: (512)471-4506                      | 50     | 12/90 | 0<br>1,000     |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS/Other\$     |
|-----|------|---|--|--------|-------|------------------|
| WR  | YOSE | Research Reserves: longterm representative habitat study  | Smith, Dr. J. J.<br>San Jose State University<br>Department of Biology<br>San Jose, CA<br>95192 Phone: (408)924-5017                                     | 50     | 09/38 | 0<br>0           |
| WR  | YOSE | Sucker-trout annual Population Fluctuations in the Merced R.  | Stephens, Dr. J. S.<br>Occidental College<br>Department of Biology<br>Los Angeles, CA<br>90041 Phone:  | 80     | 12/91 | 0<br>0           |
| WR  | YOSE | Tree-Ring Reconstruction of Giant Sequoia Fire Regimes  | Swetnam, Dr. T. W.<br>University of Arizona<br>Laboratory of Tree-Ring Research<br>Building 58, West Stadium<br>Tucson, AZ<br>85721 Phone: (602)621-2112 | 60     | 06/91 | 65,799<br>17,472 |
| WR  | YOSE | Biosystematic studies on the Isoetes of North America.  | Taylor, Dr. W. C.<br>Milwaukee Public Museum<br>800 W. Wells St.<br>Botany Section<br>Milwaukee, WI<br>53233 Phone: (414)278-2760                        | 100    | 6/89  | 0<br>500         |
| WR  | YOSE | The Distribution, Population Abundance, and Habitat Requirements of the Sierra Mountain Beaver in Yosemite NP | Todd, Mr. P. A.<br>717 Longstaff<br>Missoula, MT<br>59801 Phone: (406)721-3127   | 100    | 02/90 | 0<br>7,550       |

| Reg | Park | Project Title   | Investigator/Address/Phone   | % done | End   | NPSS\$/Other\$ |
|-----|------|---|--|--------|-------|----------------|
| WR  | YOSE | Rephotographing Early 20th Century Scenes in Yosemite National Park | Vale, Dr. T. R.<br>University of Wisconsin<br>Department of Geography<br>Madison, WI<br>53706 Phone: (608)262-6301                         | 90     | 09/90 | 0<br>0         |
| WR  | YOSE | Status of the Great Gray Owl in Yosemite National Park              | Van Riper III, Dr. C.<br>Northern Arizona University<br>Center for Colorado Plateau Studies<br>Flagstaff, AZ<br>86011 Phone: (916)752-6273 | 90     | 09/90 | 0<br>0         |
| WR  | YOSE | Geographic Information System Research                              | Van Wagendonk, Dr. J. W.<br>National Park Service<br>Yosemite National Park<br>P.O. Box 700<br>El Portal, CA<br>95318 Phone: (209)372-0465 | 40     | 09/95 | 50,304<br>0    |
| WR  | YOSE | Fire Dynamics Research  | Van Wagendonk, Dr. J. W.<br>National Park Service<br>Yosemite National Park<br>P.O. Box 700<br>El Portal, CA<br>95318 Phone: (209)372-0465 | 50     | 09/94 | 40,000<br>0    |
| WR  | YOSE | Geology of the Tower Peak Quadrangle                                | Wahrhaftig, Dr. C.<br>U.S. Geological Survey<br>MS-917<br>345 Middlefield Rd.<br>Menlo Park, CA<br>94025 Phone: ( )329-4697                | 50     | 00/00 | 0<br>0         |





